



THE ALKALOIDAL CLINIC

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EDITORIAL

THE PLAGUE.

The outbreak of bubonic plague in San Francisco has aroused the most profound interest in this epidemic. The health authorities attempted to subject the Chinese population to compulsory vaccination with the Haffkine virus, but the resistance was so determined that the plan was given up. This is a pity, since if the measure was a proper one the authorities should not have backed down, while if not perfectly sure of its propriety they had no business attempting it. By the time this reaches our readers we will know whether our western metropolis is to repeat the experience of Oporto or not.

There is this to be said, that the epidemics of plague in Asiatic cities showed that the well-fed European was less likely to fall a victim than the poorly-fed, vegetarian Asiatic. In Hongkong the mortality was: Eurasians 100, Chinese 93, Indians 77, Japanese 60, and Europeans 18 per cent. The Indian's food consists mainly of rice and other

vegetable products; the daily ration averaging 1300 calories, while the figure for an ordinary workman is 3000 calories. Moral: Eat heartily, a generous diet, with plenty of meat.

Like all epidemics the plague haunts the slums, prevailing among the crowded, dirty, ill-ventilated hives where the poor and depraved congregate. The class who know and practise the laws of hygiene are in comparatively little danger, though, like smallpox, the plague may be transmitted by contact to any person coming into the sphere of its influence.

Besides rats, other animals, such as mice, snakes, beetles, bugs, flies, dogs and jackals become infected. Purely herbivorous animals are not affected.

Kitasato advises that patients recovering should be isolated for one month.

Yersin's serum is prepared by subjecting virulent cultures of the pest bacilli to a heat that destroys them. These are injected into horses, at first affecting them profoundly, in time by repetition

rendering them immune. When reaction to the toxin ceases it is administered intraperitoneally and intravenously, and followed by intravenous injection of a toxin specially prepared to render soluble the toxin in the dead bacteria. This may be supplemented by intravenous injections of live cultures, and the serum tested. When 1-10 cc. protects a mouse weighing 25 grams against living cultures and three times the mortal dose of toxin, the serum is both protective and curative. At Oporto the mortality in cases treated with Yersin's serum was 14 per cent, while in other cases it was 70 per cent.

Haffkine's serum is prepared by planting pest bacilli on agar-agar, maturing four days, taking up the growth on bouillon, free from peptone, heating to 70 C. for one hour, and the product transferred to sterile tubes and sealed. Five cc. of Yersin's serum confer immunity for about fifteen days. One cc. of Haffkine's confers an immunity more slowly established but lasting longer—just how long is not determined. The percentage of protection is 85 in those once vaccinated, 95 to 100 per cent in those twice or oftener vaccinated. If the Haffkine serum is used on persons incubating the plague it may kill the patient. Only the Yersin serum should be used on those who have been exposed to the chance of infection.

The spread of the plague by the agency of rats, and possibly by parasitic insects, renders it advisable that fumigation should be by burning sulphur, which destroys these creatures, and not by formaldehyde, which does not.

Ambulant cases are especially dangerous, as they may not be very ill, but the buboes, secretions from the lungs, etc., may transmit the severer forms of the malady. All cases of illness in persons coming from an infected locality should be held under strict surveillance and

tested by competent bacteriologists until well.

The disinfection of infected articles should be done in the same manner as with smallpox; all possible use being made of fire. The city that puts itself in perfect hygienic condition escapes the plague; that which neglects these precautions pays for it in the lives of its citizens.

Much of the foregoing has been taken from the circular issued by Surgeon-General Wyman, of the Marine Hospital Service. This document should be secured by every physician who may have to face the plague.

La Salud, of Buenos Ayres, deprecates the unwarranted fear of the plague, calling attention to the last attack in Alexandria, Egypt. This occurred in the bazaar, among the most abandoned class. No sanitary cordon was adopted, but traffic proceeded as usual. The district was cleaned, the sick isolated, their families placed in detention camps. Out of a population of 320,000 the cases were 92 with 45 deaths. At Oporto, a notoriously filthy city, of 100,000 people, there were 300 cases with 110 deaths, in six months. Sanitation and a cordon were the remedies. The disease appeared in Lisbon, but did not spread. On Oct. 14, a ship entered Plymouth, England, with a case of plague on board. The passengers landed and went their ways, the patients went to a floating lazaretto, part of the ship was disinfected, and that was all. The *Lancet* remarked: "There was a time when the announcement of a case of plague on the English coast would have produced a panic; now such an event hardly arouses attention, so secure are we that the spread of the disease is impossible in this country." In none of the South American cities, even those noted for filth, has the malady spread in a manner to occasion alarm.

Commenting on the foregoing the *Santarian* disagrees, and advocates quarantine. Plague is contagious, as well as infectious; it is most difficult to root out when once admitted, and only by burning infected houses; England has a port sanitary system equal to a quarantine; few populous cities are in such a state of sanitation as to defy the pest; quarantine is rigid in the English colonies; it would not be possible to keep track of the passengers scattering over our country; etc.

But our contemporary proceeds to argue against his own side, by admitting that it is a mystery how the plague reached Oporto and Santos; carriage by food products packed in infected places is yet undetermined; while ambulant cases and rats may spread the disease in spite of quarantine.

The case may be summed up thus: It has been fully shown that cities properly clean are in no special danger; quarantine is notoriously untrustworthy, and does more harm than good by leading the people to put their trust in it instead of in sanitation. By all means kill the rats, isolate the cases and place possibly infected persons in detention camps, but let it be plainly understood that it is the duty of every community to protect itself by putting itself in thorough hygienic condition.

Sternberg says that the plague bacillus is very easily killed by disinfectants. Direct sunlight destroys it in four hours; quicklime or a 2 per cent solution of carbolic acid kills it almost immediately.

They who live in a worry invite death in a hurry.

RULES FOR DIET.

1. Eat when you are hungry.
2. Drink when you are thirsty.
3. Eat enough and then stop.
4. Eat what your appetite calls for.
5. Train your appetite and your stomach

ach by eating the greatest possible variety. You are not a shirk; why should you let your stomach become one? Many foods are not liked the first time they are tasted, such as oysters; hence unless you try a thing several times you do not know whether you like it or not. Hence, never say you dislike a thing till you have eaten of it three times.

6. Regulate the composition of your food by the work you do, using strong food when you are doing hard work, lighter food when sedentary.

7. Don't let your doctor attempt to regulate your diet by his own stomach.

8. Beware of the diet crank. All beyond this is foolishness and vexation of the stomach.

HYGIENIC FOOD.

Whenever a man takes to hobbies in the way of foods it is a sure indication that his digestive apparatus is going back on him. As long as he and his stomach are on terms of amity he eats what his appetite calls for and rises from the table happy, comfortable and thankful. But when the first beginnings of pathologic changes occur in the tissues of his digestive apparatus he shows it by getting cranky about his food. He commences to object to this or that manner of cooking, to this or that sort of diet; he goes on to theorize concerning the intentions of the Creator as to the proper food for man; but unless he can find plain Bible confirmation for the views he has by this time formulated, he "chucks" the authorities and goes on what he calls reason, but a reason no one but himself can follow. And yet nothing will make him madder than the suggestion that his theories are the product of digestive pathologic conditions and not the result of profound ratiocination.

The morbid-tissue condition may be remedied, but the mental twist is usually permanent. Concentrate the attention

on the digestive functions and never again will that man cease to know that most disastrous of appreciations, that he has a stomach.

These thoughts were developed by a visit recently made to an alleged "health food restaurant." Now we have as yet a stomach with which we are on reasonably good terms. We eat happily, and digest thankfully. We have a creditable rotundity on the anterior inferior aspect of our anatomy. But the curiosity bump is fully and normally developed, and we never could resist the fear that if we failed to try every new dish offered we might lose something. So we took courage, and sailed in.

There is a most delectable array of novelties on the bill of fare, things we never heard of before! We tried a "mock cutlet" and found it composed of sawdust covered with corn meal and egg. "Fruit nectar" we recognized at once as the pink lemonade of our circus days, much attenuated. "Imitation roast" was a concoction of lentils that we will long remember, as it nearly killed us the following night. "Vegetarian" steaks, sausages, and similar professed imitations of real foods, defied analysis. Some of them were right pleasant to the taste on their own merits, but had not the slightest resemblance to the articles after which they were named. But the hygiene of it! The desserts would knock out the digestion of any ostrich. Iced drinks served with the meals! Rancid butter! We would be willing to qualify that any graduate of that restaurant, who could eat and digest the food as served there, need have no fear of anything he could swallow. If there is a single principle of physiologic diet not violated there, the writer would like to know what it is.

Beans and peanuts are not easy of digestion. Few men possess the digestive capacity for such a steady diet. The effects of such food could only be what the

immortal Sellers claimed for his eyewater —the more you use the more you'll need.

If any confirmation of this view is needed, just take a glance around the room at the customers. Note the long faces, the corners of the lips drawn down, the lantern jaws, the wretched, dyspeptic expression. Not a single normal or happy face in the lot. "Crank" written on every countenance. Every face tells you at first sight: "I've got a stomach;" or rather, it has got me. "I am no frivol; I've got ideas of my own. I study my food and eat for a purpose. Just ask me what the Lord intended men to eat and hear me orate."

Give me the mineral spring crank, and I'll fraternize with him. Send me the lost manhood, the hypochondriac, the hysterical, the misunderstood, and the good all-around dyspeptic, and I'll embrace them. But of all the forms of monomania on the face of this crazy earth, deliver me from the diet crank. He is totally incurable, unreasonable, incapable of thinking or conversing on any topic except his bowels, and in short, is no fit company for man or beast.

INFANT DIET.

It is simply impossible to say anything new on the subject of infant diet, and even concerning the treatment of summer diarrhea we can do no better than advise you to turn to the CLINIC of July, 1898, and adopt the principles there laid down. Nothing has been since discovered to alter a word there written. The years slip away faster and faster, but the close of each summer simply adds another season to the record of every case of summer complaint treated with the sulphocarbonates and not a single death. Why repeat the details? Mention we must, for otherwise the newcomers would not know, and the older readers might be led astray after the newer methods so constantly put forth. We stand at all

times ready to adopt the new if it is better than the old; but as yet have not found this to be the case.

Beware of milk as a diet for children in the hot weather. Fruit juices, animal broths, the raw white of egg, farinaceous foods, all most carefully prepared, preserved and administered, are the choice.

Watch the stools, and on the first indication of bad odor or unhealthy appearance, begin the use of the neutralizing cordial with the sulphocarbonates of zinc, lime and soda, whichever is indicated.

EPSOM SALTS.

Last June Dr. Culbertson had the nerve to present the A. M. A. a paper, on what? The latest German synthetic, protective serum, surgical technique? Oh, no. His paper was on the common, old-fashioned remedy, Epsom salts! Nevertheless, of all the papers presented to the section at that meeting not one was better received or more widely commented upon.

Whenever a genuine attempt is made to advance or clarify our therapeutic knowledge the profession recognizes the effort and welcomes it; while the advertisement, scarcely pretending a disguise, is at once detected and set down at its true value.

EGGS.

Cotton calls attention to the importance of eggs in the diet of infants. No manipulation of milk will make it meet the needs in many cases. Eggs are plentiful, cheap, easily obtained fresh by those who will keep hens or take the trouble to find others who do; they are easily prepared, and absolutely free from disease. Egg albumen is much more easily digested by the child than is the casein of cows' milk.

MALT.

Under the title of "Malt Coffee" Morden advises the use of malt as a food for infants. There is no special advantage in lugging in the name of coffee, to which

malt has not the shadow of a right. Malt has been used as an infant food for many years, being warmly advocated by one of the Meigses of Philadelphia. Malted grain is obtained from brewers, roasted and kept in clean cans. Four tablespoonfuls are steeped in a pint of hot water for half an hour or more, and used in a nursing bottle or fed in the usual way. In very hot weather, or when the conveniences for keeping are not good it should be freshly prepared each time it is to be used, though the consequences of its decomposition are not so dangerous as in the case of milk. Malt is so very cheap that no false economy need be exercised in the way of preserving doubtful samples. Malt is readily digestible, quickly entering the blood, highly nutritious, easily prepared, not prone to spoiling, palatable and cheap.

POVERTY OR IGNORANCE?

The *Sanitarian* attributes the high death rate in Brooklyn's infants to the presence there of a large proportion of citizens who are too poor to send their families out of the city during the summer. Surely it is inconvenient to be poor; but that does not hinder one's using what precautions are within reach, and it does seem that the use of other food than milk, and the sterilization of the latter, could be reached even by a laborer's family. It is not poverty but ignorance that causes the aestival slaughter of the innocents. This, and prejudice; though many physicians are following our example and using the intestinal antiseptics without waiting for the "scientifics" to determine how they act.

INFANTS' DIARRHEAS.

Sykes doubts whether teething really causes diarrhea at all, and so do we. During the siege of Paris the infant mortality was reduced, because mothers had to nurse their babes instead of feeding them. Ross produced thrush from the feces of diarrheic children, but only when

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the nates were excoriated. All the unhygienic influences that aid in killing children in hot weather do so by favoring the decomposition of milk. Out of 2,000 deaths of children from diarrhea only three per cent were breast-fed. In summer diarrhea the feces swarm with many species of bacteria, some very poisonous; these are multiplied outside the body and widely disseminated; they grow best in milk. The anatomic classification of diarrheas is impractical, because there is no correspondence between the symptoms and the lesions found. Thorough asepsis and cleanliness, free drainage, freedom from irritation, and perfect rest, are the principal indications for treatment.

He (or she) who sits down to wait for somebody's old shoes will need a cushion before he gets them.

Dr. R. H. Baylor, of Erin, Tenn., writes us that he has just passed through his second attack of whooping cough at the age of 64 years. This is an exceedingly remarkable case. Does Tennessee contain the fountain of perennial youth?

ENDOMETRITIS.

I have to record one untoward result following the use of europhen-aristol with petrolatum in a case of endometritis. The patient was a lady who had suffered for a long time with this malady, which had resisted all the ordinary methods of treatment. She came to my office for treatment, and returned after each visit to her temporary home some miles away, by walking and the street cars. The vagina was not flushed with antiseptics before the treatments, because the circumstances were such as to absolutely preclude the possibility of gonorrhreal infection, and the lady was of the class who keep themselves neat. Three injections

were made, on separate days, and each was followed by some pain. After lying down for an hour the patient returned home, the irritation not being sufficient to interfere with this, or with her return for treatment on the following day. The third injection was followed with quite severe pelvic distress, whose nature is not known to the writer, however, as she was under another physician's care. As related, the symptoms were of a moderate non-septic peritonitis, from which she recovered in due time.

That the symptoms were not due to the omission of the vaginal flushing is evident. Our explanation is that in this case the fallopian tubes were unusually patent and some of the solution escaped into the peritoneum. This would also explain another case reported to the CLINIC, in which the injection of the same mixture caused pain, whilst no difficulty ensued when the same mixture was applied on a cotton-wrapped probe. At the time we were unable to account for this, but if the fallopian tubes were unusually open it is easy to see that an injection might carry the fluid into them, when the application on cotton would not be forced out of the uterine cavity.

We have a double duty in recording this case, because it is important to give the dark as well as the bright side of remedial measures, and because we did not do justice to the acute observer who reported the other case. He had the nerve to go ahead with the remedy, and found a way of applying it without objection, after experiencing difficulty when he used it in the usual way. Otherwise he would have lost the great advantages afforded by the use of this valuable application.

The Hundred Year Club, of our eastern seaport, begins most wisely by adopting the Chinese custom of paying a doctor to keep them well and so order their lives as to secure the longest possible continuance of that good health

that alone renders long life desirable. What a grand idea! And what a grand medical director we would make for that club!

SUMMER DISEASES.

The history of intestinal antiseptics is that of most others of supreme value. They came into use as agents of obvious utility when the investigations of the pathologist had demonstrated the existence of pathogenic micro-organisms in the alimentary canal. Then came the question of whether they did really disinfect it, and the bacteriologist found that by none of the agents tested could the intestinal tract be rendered surgically clean and free from micro-organisms. Then the short-sighted went to the other extreme, and very illogically concluded that these agents were useless. It does not require much knowledge of logic to see that such a conclusion was totally unwarranted.

But without bothering about the laboratory people and their absence of logic, the great mass of practitioners throughout the country were applying the clinical test, and were getting such unmistakable results that they refused to discontinue the use of the remedies. Surely, no one will accuse us of undervaluing the laboratory and its methods. The pages of the CLINIC are full of our encomiums of this most essential part of the modern practice of medicine. But when the laboratory has furnished its report the result is our own to estimate, to elucidate by harmonizing with our clinical observation, and the reasoning by which we come to conclusions is all our own. The laboratory simply furnishes us material which we ourselves use. It is our servant, not our master. And, valuable as is the evidence it furnishes us, our own observations have also their value, and must be fully weighed. Consequently, when we

find that in hundreds and thousands of cases, observed by hundreds and thousands of doctors, the administration of the sulphocarbonates in doses sufficient to render the stools inodorous, is followed by a fall in fever, and by the disappearance of tympanites, delirium, dryness of the tongue, and from thirty to fifty per cent of the symptoms of the malady, we claim that this observation is entitled to respect and demands consideration and explanation fully as much as that other observation made in the laboratory.

Here are the facts, which we do not ask any physician to take on our word, but to verify for himself. It is for you to explain them; and it will not do to say that they are only based on the most unreliable of testimony, clinical observation, for without that your own conclusions are worthless. Suppose for instance that the laboratory announces as a result of its experiments on dogs that arsenic is a valuable purgative, and we apply it thus in our practice! But, we say, experience has shown that arsenic is violently poisonous. Never mind, they say, clinical experience is notoriously fallible, and the laboratory declares that arsenic is a purgative. Is not clinical experience as worthy of consideration in the case of intestinal antiseptics?

The reaction against these agents seems to have spent itself, and we at last see the true question coming to the front, the explanation of how they act. They may not destroy every micro-organism in the alimentary canal, but they limit their reproduction or destroy a large number of them, and thus restrict the output of toxins. They may cut off the allied bacteria that would otherwise join the original invaders in their onslaught against the vital forces. They may neutralize or hinder the absorption of the toxins. Many explanations may be suggested that will not be inharmonious with

their failure to completely sterilize the alimentary canal.

It is becoming rare to pick up a medical journal without seeing in it the recommendation of this remedial measure, and the men who are quoted are by no means the least known in the profession. Several journals have published Prof. Anders' paper on typhoid fever, in which he unequivocally favors intestinal antisepsis. But few of the "leaders" as yet appear to appreciate the revolution in the treatment of the summer complaint worked by the introduction of the sulphocarbonates.

The only difficulty with these agents is in obtaining them pure, and thus avoiding the gastric irritation caused by the commercial salts. The Abbott Alkaloidal Co. has found it advisable to have the sulphocarbonates of zinc, soda and lime made expressly for its use, of chemical purity, to avoid the possibility of trouble on this score. The W-A Intestinal Antiseptic tablets contain these three salts, with the addition of bismuth subnitrate, to enable the user to apply Bouchard's test without unnecessary trouble.

LAXATIVES.

In all cases of bowel mycosis it is advisable to clear out the bowels first, by suitable doses of castor oil, saline laxative or rhubarb. This renders possible the task of rendering the bowel aseptic, for how can we hope to do this if there is a mass of decomposing feces there? It would require more antiseptics than the human body could bear to disinfect such a mass, let alone the mechanical difficulty of permeating it with chemical agents. Experience has amply demonstrated the value of clearing out the bowel, and just as amply the fact that such cleansing is not enough but must be followed by disinfection. Eccles found that when the bowel had been flushed by colonic enemas the results were not as

good as when followed by antiseptic applications. Calomel and other evacuants have long been recognized as valuable in treating diarrheas, and many still rely upon them; but they fail in many cases where the sulphocarbonates succeed.

The neutral cordial (rhubarb, hydrastis, sodium carbonate and sulphocarbonate, ipecacuanha and aromatics), has long been popular, and is frequently advised in these pages. The Abbott Alkaloidal Company has just added to its list a sugar-coated tablet containing in each the components of a dram of the cordial, minus the syrup. It is convenient to carry and more easily taken by many; the therapeutic effect is the same. Whenever a child's stools appear unhealthy, fermented, loose or offensive, begin at once with this mixture and give a tablet every two hours till the discharges are healthy. If improvement is not soon manifest add the sulphocarbonate. The zinc salt is more astringent, and more effective. Give a child in the second summer a granule, gr. 1-6, every half hour, adding a grain of bismuth subnitrate if nausea is present. If acidity is manifest substitute sodium sulphocarbonate, in double the dosage. In cases more chronic, or where there is a cachectic condition, choose calcium sulphocarbonate, in dose similar to that of the soda salt. Neither of these is as likely to irritate the stomach as the zinc. If irritability persists, the salt is probably impure, and the W-A Intestinal Antiseptic tablets should be employed, giving half or a quarter tablet at each dose, to a child in the second summer. Push the remedy fearlessly till the desired effect is obtained. None of these salts is toxic in any dose.

ANTIPYRETICS.

Even in summer complaint there is nothing to contraindicate the use of aconitine for fever, strychnine for relaxation and depression, hyoscyamine to lessen

pneumogastric irritability, codeine in the smallest doses to check excited peristalsis, nuclein to sustain the vital forces, and such other agents as the symptoms indicate. Indeed, hyoscyamine so directly counteracts the pneumogastric irritation, manifested by purging and vomiting, that it is the true physiologic remedy for the symptoms, the antiseptics being directed against the cause.

ANODYNES.

It is so well understood now that opiates add immensely to the dangers of summer complaint, that few need to be cautioned against them. The only indication served by them is checking excited peristalsis, and this requires very small doses, if, indeed, hyoscyamine does not fully accomplish the object unaided. If opiates are used at all it should be in the shape of codeine, or the Infants Anodyne, whose formula shows it to be admirably fitted for this purpose. Nickel bromide gr. 1-134, codeine sulphate gr. 1-67, ipecac gr. 1-134, lithium carbonate gr. 1-25, and oil of anise gr. 1-134. Give one to three granules every hour, and you will be pleased.

For adults we frequently require a prompt and powerful means of relieving pain and checking diarrhea, and this we find in the Chlorodyne granule, which will always be found in the case of the doctor who has once used it.

The old-fashioned Dover's powder met many indications, where the soothing influence of opium and the secretion-stimulant action of ipecac were desired. The modification made by Dr. Waugh, adding camphor monobromide instead of the potash, and using the alkaloids instead of the crude drugs has immensely added to its efficacy. In dysentery especially, where the large dose of opiate is so deadly, the minute dose so grateful, this combination is most effective. Truly, the delicate hand of the artist is shown in handling this agent.

ANTIFERMENTS.

Carbolic acid is not suitable for extensive use internally, since it is too irritant to be given in fully effective doses, and it breaks up the red blood cells and produces hemoglobinuria. But in some forms of vomiting, in *sarcinae ventriculi*, and especially in gastric cancer, it is notably effective. In all these, if it prove irritant, substitute salicylic acid, giving of either one or two granules every half hour.

Aulde recommended copper arsenite especially in non-inflammatory diarrheas, and affections of the duodenum. It is best given in the smallest doses, gr. 1-1000 to 1-5000, every hour till improvement ensues. To this agent Dr. Arnold adds corrosive sublimate, itself popular with many in dysentery, and employed in a variety of intestinal maladies. Many of our readers have testified to the value of these agents. Both are antiseptic, and efficient in small doses; but neither can be increased without producing toxic symptoms. Hence, if the ordinary doses fail, the less toxic agents must be utilized.

Cotoin was urged by the late Dr. Engel as a specific remedy for the diarrhea of tuberculosis of the intestines. Indeed, he went so far as to assert that any diarrhea relieved by cotoin was necessarily of tubercular origin, and hence employed this agent for establishing the diagnosis.

Creosote ranks with carbolic acid as to indications, that being preferred that agrees best with the patient. Some will tolerate one and not the other.

Let me give you a pointer on biliousness: Don't roil up your internals with mercury, nor lose time with alkalies, etc., but stop off your patient's diet for a day, and give him 1-4 to 1-2 grain of emetin at one dose, with no water, and compel him to lie absolutely motionless for half an hour after swallowing the dose, so as to prevent emesis. If he does vomit there is no great harm done, but it is best

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not. Then touch him up for a fat fee next day, for the world will then be his!

CHRONIC FORMS.

When the acute phase of dysentery has passed and the discharges continue to be bloody and slimy, minute doses of corrosive sublimate, gr. 1-134, are very effective; but in some cases they fail, and then is the time to administer hamamelin, one to three granules every hour. Hydrastine also is a useful agent to give tone to the alimentary mucosa and thus favor the restoration of healthy conditions. It seems to act on the tissue elements as the volatile oils on the mucous surfaces. To some extent the latter are represented by menthol, but we very often advise the use of oil of turpentine, eucalyptus, cinnamon, or the peroxide-charged Sanitas oil. Flatulence is the special symptom indicating these agents, in any affection; and the dose is whatever quantity is required to subdue the symptom and promote healing of intestinal ulcers.

PROPHYLACTICS.

Two of the most valuable summer remedies are quassin and agaricin. The beginnings of summer diarrheas for old and young are frequently to be found in the heat, that causes sweating, debility from loss of salts, consequent thirst, immoderate drinking, more sweating, inability to eat, and finally heat-exhaustion or gastro-intestinal disorders. Meet the difficulty at the outset by giving a few granules of agaricin to tone up the skin and prevent sweating, and quassin to keep up the appetite and the digestion. Add perhaps a few drops of phosphoric acid, forbid all iced drinks, and your patient may say to the dog-days: "Oh, I don't know. You're not so warm!"

ASTRINGENTS.

The role of the astringents is very inconspicuous in modern practice, but when diarrheas or dysenteries drag on too long, from debility and relaxation, strychnine,

and the oxides of zinc and silver are the most valuable of their class. With all three the rule is, the smallest of doses, repeated at the shortest of intervals till effect, with the proper dietary and hygienic regime.

SUMMARY.

In the management of inflammatory affections of the alimentary canal, how far may we carry out the principle of treating them as inflammations, without reference to the looseness? Time was when the sole thought was to stop the discharges, but this is past. Suppose we moderate the fever by our Defervescents and Triads, deplete the congested intestinal mucosa by hot enemas and small doses of Saline Laxative, add to the enema bismuth subnitrate to subdue the inflammation locally as we would that of orchitis, enforce absolute rest, physical and physiologic, sedate the excited pneumogastric with atropine, and treat other conditions as they arise?

Too little seriousness is a dangerous thing; too much is absolutely fatal.

A SURPRISE?

As is now well known to the public, a large section of the ambulance corps sent out from Chicago to the Transvaal under Red Cross auspices tore off the badges of peace, seized the proffered rifles and plunged into the combat as active participants.

But does this surprise any one? Miss Clara Barton is a noble woman, justly venerated for the work she had done in the Red Cross; but she surely must be growing old. Did she really believe her corps, bearing the names of Burke, Murphy, O'Donnell, Gallagher and Macnamara, were going to stand by idly, or look after the wounded, when a fight was in progress! Come, come, Miss Barton. That is too transparent.

LEADING ARTICLES

SOME SURGICAL SUBJECTS.

BY EMORY LANPHEAR, M. D., PH. D., LL.D.

Formerly Professor of Surgery in the Kansas City Medical College and in the St. Louis College of Physicians and Surgeons.

OPERATIONS ON THE FACE IN CHILDHOOD.

LN operating for hare-lip, nevus, or other conditions about the face of a child, much trouble may be saved and infection often prevented by a very simple thing: When the operative work is completed a little cotton is placed around each elbow, and a few turns of a plaster-of-Paris bandage made above and below the joint for about three inches. This quickly sets and effectually prevents the child's getting its hands to the wound, though it does not at all interfere with movement of the arms and therefore does not worry the little one as does tying the hands or pinioning the arms.

PROPER SEWING OF THE ABDOMINAL INCISION.

In the practice of a most careful, skillful surgeon, I recently saw a most deplorable result from improper closure of the abdominal wound. He made an otherwise faultless abdominal section, closing the peritoneum with a row of catgut sutures and then the "through-and-through" silkworm-gut stitches so popular with most operators. Persistent vomiting forced the peritoneal edges apart and allowed a knuckle of ileum to become caught beneath the fascia — with

fatal obstruction in spite of a secondary operation. Had the method of closure been adopted which I have practised for so long, this accident could not have taken place. It is as follows: When the toilet of the peritoneum has been completed the cut edges are brought together and sewn with fine catgut, great care being taken that no holes are left; then either large catgut or fine silkworm gut sutures are introduced through skin, superficial and deep fascia, and every other one through the raphe of peritoneum formed by the first line of sutures; when enough of these have been put in to close the wound nicely they are laid aside untied and the deep fascia sutured by a few catgut stitches; then the external sheath of the rectus is similarly sewed (the cut being made when possible through the rectus) and finally the silkworm-gut stitches are tied, not too tightly. Pulling apart is impossible and late hernia almost so.

EMPYEMA IN CHILDREN.

Too many cases of pleuritic effusion in children are unrecognized — simply for want of careful examination. Every child presenting a history of cough and fever should be subjected to a thorough

physical examination. If fluid be found it should not be aspirated (on account of the danger of infection) until it is absolutely sure that absorption cannot take place under appropriate internal medication. A certain proportion of cases will, however, go on to the formation of pus in the pleural cavity, when the necessity for surgical treatment becomes imperative. Delay means death; or at least sepsis and often bad deformity. Happily during childhood the graver Estlaender and Schede operations are seldom required, simple incision and drainage being sufficient.

I cannot too strongly urge the importance of doing this operation under the strictest antiseptic precautions, far greater indeed than usually practised by the average practitioner. The reason of this is that a large proportion of empyemata may be traced to the tubercle bacillus; and if upon this there is engrafted a streptococcus or a staphylococcus infection a death may result which could be prevented by more careful attention to surgical cleanliness. For the same reason the chest must be carefully protected by an abundance of bichloride gauze during the entire period of drainage.

CATGUT LIGATURES AND SUTURES.

The objection of careless, dirty and lazy operators to the catgut ligature, viz., "it cannot be readily and easily sterilized, or if so cannot be kept clean," is now removed, and this ever-excellent suture material may now be used by all. In the form of "formaldehyde" gut, as prepared by Hollister of Chicago, we have a reliably sterilized catgut put up in sealed glass tubes which are broken in a sterilized towel so as to avoid contamination of the material by contact with unclean hands, etc.), as the cut is needed. Whatever is left over should be carefully wrapped in bichloride gauze until the next operation, when it may be

put in the pot with the instruments and boiled just the same as silk. The only objections to catgut which may now be urged are that it is expensive and that it requires somewhat greater care in the aseptic technic. Men who are careless in their methods (and there are scarcely two scores of ideally clean operators in America to-day) should still use catgut with caution; those who are measurably clean may employ it with fair prospects of good results.

VAGINAL HYSTERECTOMY FOR PUS-TUBES.

Time was when I believed that removal of pus-tubes by abdominal section constituted the ideal method of treatment. Experience has taught that vaginal hysterectomy is far preferable when the pyosalpinx is double. It should be remembered that the ovaries, not the uterus, are the essential organs of woman; and that the uterus without the ovaries and tubes is an absolutely useless organ—nay, worse than useless, for it remains to be the site of gonorrhreal or other infective processes which may render life miserable, or a second operation necessary. Therefore, for the past two years I have been subjecting patients with pus in both fallopian tubes to vaginal hysterectomy. The result of this work is such as to convince me that the ideal method for most of such cases is the lower and complete operation. The patients suffer far less from this procedure than from an abdominal section, there is far less danger, convalescence is much smoother and ultimate results far better. The only objections are that (1) it is much more difficult for the operator—especially for one not entirely familiar, practically, with the anatomy of the pelvis, and (2) women sometimes will not consent to the removal of the womb. This operation is undoubtedly destined, in spite of these objections and the opposition of enthusiastic celiotomists who prefer the easier to the

better way, to become the chief method of relief of chronic pelvic suppuration.

OPERATION FOR IDIACY.

Some seven years ago, following Lan-ne longue's experiments, I operated upon twenty-two microcephalic and other idiots with varying results. Some died within a short time, most remained unaffected, a few greatly improved, none were cured. So after watching the progress of these patients for some years I most unhesitatingly condemn operation save in exceptional cases of microcephalus. Recently there has been an attempt on the part of some ambitious operators, endowed with more enthusiasm than good sense, to revive the Lan-ne longue operation for idiocy. I sincerely hope that few doctors will take their idiotic patients to these surgeons, for nothing but disaster or failure can be expected save in possibly a very few instances of microcephalus, where decided improvement (though never a brilliant result) occasionally may follow double craniectomy.

CAN CANCER OF THE UTERUS BE CURED?

A question more frequently asked of the operative gynecologist than perhaps any other is: Can cancer of the uterus be cured? I can most positively answer this in the affirmative. Cancer of the womb can be cured by early operation; nearly all may be relieved—life being prolonged from one to three years and suffering greatly diminished. I can speak emphatically in regard to this matter as I have operated considerably more than 200 cases, with a very low primary mortality and a comparatively small percentage of recurrences. While it is true that in more than half of the patients the disease was but temporarily arrested, in many an undoubted cure has been secured. For five women have lived more than nine years, nine others more than seven years and nearly thirty others more

than five years. In every one of these cases the diagnosis was fairly plain at examination and the microscope confirmed the existence of cancer. Surely results such as these warrant us in maintaining that cancer of the uterus can unquestionably be cured by early operation.

In view of this I hope every reader will henceforth look more carefully into every suspicious case and if any evidences whatever are found pointing to cancerous disease, refer the patient to some competent operator. Waiting until the trouble can be positively diagnosticated by pain, fetid discharge, etc., usually means death. Every woman who has an irregular menopause, and especially every woman past forty, who has excessive uterine hemorrhage, should be subjected to the most careful and repeated examinations for evidences of cancer; and in every case of doubt the advice of a specialist should be sought. The reliable gynecologist is not going to advise unnecessary operation; the conscientious surgeon is not going to make a hysterectomy just for the fee; but in every instance the patient should be given the benefit of the doubt. Vaginal hysterectomy, properly performed, is not a dangerous operation. Operation too long delayed invites disaster.

St. Louis, Mo.

BURNS.

By JAMES PICKETT, M. D.



HIS class of cases is oftentimes among the most difficult as well as the most serious the physician has to treat, and it is with an earnest desire to help some brother that I am induced to write this article.

In order to get the subject clearly before our minds I shall briefly give the symptoms of burns of the third degree. I quote from Ashhurst. The constitutional symptoms are, great collapse with

pale surface, cold extremities, quick and feeble pulse. At times there is violent and repeated shivering and the patient complains of being cold. The periods of danger are three; first, during the first four or five days, from collapse or imperfect reaction; second, during the sympathetic fever which follows; third, the suppurative stage in which the patient may die from exhaustion. Kentish says many patients die on the ninth day.

In treating these cases our first duty is to establish reaction and relieve pain. The following doses are for adults, children in proportion. To bring about reaction I have invariably succeeded with the following prescription, aided by artificial heat in the form of bottles of hot water packed closely about the body of the patient: Strychnine arsenate, gr. 1-134; quinine arsenate, gr. 1-6; glonoin, gr. 1-500; alkaloidal Heart-Tonic, twenty-four granules each; distilled water, three ounces. Direct: One teaspoonful every half to one hour till reaction is established, after which continued at intervals of two to three hours till recovery.

The above is a fine stimulant and tonic, and can be depended upon. If reaction is tardy I frequently add an extra Heart-Tonic granule to the above, and repeat if necessary in fifteen to twenty minutes. We must be governed by the pulse and general condition of the patient. If coma threatens or exists, atropine plays its part with the above.

Now comes the local dressing, and I cannot say too much in favor of the following formula: Powdered boric acid 5 1-2 drams, balsam fir 5 ounces, vaseline 11 ounces. Mix. Direct: Grease slips of soft cloth with the above unguent and apply smoothly over the burnt surface, over this layers of absorbent cotton, and secure the dressing with a roller bandage. If we find any burnt integument hanging in shreds they should be moved before applying the dressing.

If the patient is a child you will find that it will almost immediately cease fretting and fall into a gentle slumber. In addition to the remarkably soothing effect of the unguent it is a splendid stimulant and promotes healthy granulations; it softens the burnt tissue and thereby hastens its separation from the living; and, last but not least, it possesses the excellent quality that it does not stick, thereby rendering redressing easy to the physician and not dreaded by the patient. Try it and you will be pleased.

To control the fever the Dosimetric trinity granule is the remedy. If, during the progress of the case, intestinal irritation should supervene, I find that pulv. ipecac associated with bismuth subnitrate and zinc sulphocarbolate, will in most cases relieve the trouble.

I have never seen a case of duodenal ulceration such as is referred to by Curing. Pneumonia has been a not infrequent complication of the cases I have treated, having existed in all but two. The following prescription I have invariably resorted to, and have succeeded in every instance except one, a small infant, who died on the thirteenth day: Hyoscyamine gr. 1-250, codeine gr. 1-67, emetin gr. 1-67, sixteen granules each, distilled water 2 ounces. Mix. Direct: A teaspoonful every two to four hours. If the accumulations in the bronchi are difficult of expectoration I add a granule of potassium bichromate for each dose.

As a food, especially for small children, I greatly prefer Horlick's Malted Milk and Liquid Peptonoids.

Burleson, Texas.

—:o:—

A good general rule in treating burns is to get the injured surface covered as quickly as possible by something that will keep out the germs of suppuration. The dressing most quickly obtainable is the best. Then let it alone, and treat the constitutional symptoms as Dr. Pickett sug-

gests. Baking soda in water relieves superficial scalds; soap is generally swarming with bacteria and unfit for dressings, the celebrated case in which it was reported as curative being a scald of the whole body by boiling soap, which was aseptic through its heat and left the body covered by an impervious coating as it dried; Campho-Phenique has been applied with benefit, quickly relieving the pain and asepticizing the surface, petrolatum is good after disinfection; while nothing gives speedier relief than caron oil, tho' useless as a healing or protective dressing.—ED.

OBSERVATIONS WHILE ADMINISTERING STRYCHNINE TO SOME THREE HUNDRED CASES OF DIPSONANIA.*

By J. S. CONWAY, M. D.

TRYCHNINE will bear further investigation by the medical profession. Leaving the ordinary accepted therapeutic action of strychnine out of the present paper, I will give some observations on its effect in some three hundred cases of dipsomania under my personal observation. The present paper will deal only with observations from this source.

Some time during the years of 1883 to '85 I experimented with strychnine for the cure of dipsomania. I found the ordinary dose was inadequate and resorted to gr. 1-20, four times a day hypodermically. In some subjects apparently not robust I could not get muscular contraction, while in some very robust subjects I would get contraction so strong that I would have to lessen the dose. I found in all cases in a few days that as to the whisky, that at first they greedily swallowed and called first class (which it was), they affirmed that I had changed the quality, that it burned their throats

and stomachs, and in a great many instances they would vomit the whisky as soon as swallowed. I was at a loss to account for this; however, I continued to treat cases, meeting with fair success.

In the winter of 1893 I was treating a number of cases and pushing the strychnine to the fullest extent with safety. I noticed that all of them, after a few days, accused me of furnishing them the poorest of whisky. I bought the whisky of Truax, Green & Co., and it was first-class, or they so stated. Now comes the peculiar test: Before relating this I wish to state that I found in all cases that the large doses of strychnine overcame the terrible nervous condition peculiar to those cases. I have never indulged much in drinking whisky; occasionally I would take a moderate portion, and can't say I dislike the stuff. However, during the winter above mentioned I had a severe spell of *La Grippe*, which left me quite weak and very nervous. I was daily injecting strychnine to some twelve patients. I conceived the idea that a little strychnine would strengthen my nerves, and four times a day injected grain 1-40. I had been treating myself some fifteen days; finally, one day I wished to fill a gallon bottle from a ten-gallon keg of old Bourbon. Not having a faucet I resorted to siphon with a rubber tube. I exhausted the air by sucking, and in the act received a generous mouthful. I swallowed it, and it seemed to act like a red-hot poker down my throat, and my stomach burned.

Now the patients that had been taking treatment had growled about the contemptible stuff and the dose I received convinced me, so I telegraphed to Chicago to a reliable house for very old whisky, \$6.00 per gallon. It came; I sampled it, which was more red-hot than the other, and the patients confirmed my verdict.

It so happened that two fresh patients

*Read before the LaSalle Co., Medical Society, at Ottawa, Ills., April 24, 1900.

came in who declared that they were judges of whisky. I let them sample both and they pronounced both as fine whisky as they ever tasted, but within ten days pronounced both contemptible stuff, direct from Hades, being so hot.

I noticed most all patients treated suffered with catarrh of the stomach, which would, during the course of the treatment, vanish. I noticed also insomnia and exceedingly nervous prostration in a majority of cases, which would be cured.

Now for the logical conclusion, which seems plain: The strychnine produced a hyperesthesia of the mucous lining of the stomach, which would account for the severe burning produced by the whisky. It also acted on the nerve center as a steadier, utterly removing the severe nervousness; also on the vaso-motor system, removing the stasis in the circulation of the coats of the stomach and curing the catarrh.

The above observations have been the means of extending the use of strychnine into a wider field in my private practice, and in my mind strychnine has a wider range of usefulness than any of our textbooks give it credit.

As to the cure of dipsomania, strychnine is the *sine qua non*, and is the basic drug of all cures for that disease. While Keeley made it an article of merchandise he deserves more credit than the profession can fairly award him.

Does it cure? I can answer that the percentage of cures will run very much higher than in any other specialty, which is enough to establish its legitimacy with the profession at large.

You ask, can any physician cure dipsomania? I answer, yes, if he knows how. Simply to know that strychnine is the basis is only a little knowledge, and "a little knowledge is a dangerous thing."

In this paper I only wished to call attention to some peculiarities noticed while using strychnine, and if I find the

profession is interested enough on this subject, I shall in a future paper give a full treatise on this subject.

Again, I wish to call your attention to another phenomenon resulting from continued radical doses of strychnine, which I feel I can safely term strychnine fever. In all cases marked by chills periodically, probably caused by the cumulative effect breaking out in periodical storms followed by rise of temperature and profuse perspiration, all this will decline on the withdrawal of the strychnine. In those cases I have never noticed excessive muscular contraction, while in other cases we have contractions of the muscles of the mouth and face, the jaws coming together strongly when eating, and the legs jerking so badly when climbing stairs that they fear to climb; but there is no other inconvenience, this passing off in forty-eight hours after withdrawing the strychnine, afterward lessening the dose, with no further trouble.

Streator, Ill.

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Dr. Conway's observation is of great importance. Probably the failures from strychnine are mostly due to the lack of care in securing "dose-enough."—ED.

THE RADICAL CURE OF HERNIA BY A NEW ELECTRO-CATA- PHORIC AND CHEMICAL METHOD.

By SAMUEL H. LINN, M. D.



HERE is probably no class of afflictions less understood by medical practitioners than the radical cure of rupture. They send their cases to the surgeon or truss maker, who very often fails to cure and sometimes do more harm than good, because their methods are not correct. We cannot blame them, as they do their best, knowing nothing of the only true method to produce a perfect, painless cure of rup-

ture. It proves that surgical practice is often an apology for better work.

The introduction of drugs into the body by electricity or the diffusion of solutions through a membrane by the anode, and of the sarcous substance of muscle from the anode to the cathode has long been known by electricians. The earliest investigation of its power to drive drugs through the human skin was made by Richard in 1859, with aconite and chloroform, also in 1886 by my friends Wagner, Adamkiewicz, Lombroso, Matteini, and later by our Frederick Peterson, who published results from time to time, using cocaine, chloroform, menthol, aconitine, strophanthin, carbolic acid, strychnine, succinimide, iodol, iodide of potash, hellenborin, etc. I believe that I was the first to use electro-cataphoric treatment in diseases of the rectum, see "Notes on the Non-Surgical Treatment of Piles and Diseases of the Rectum and its Adjacent Organs by Electro-Cataphoric Intervention, etc." Reprint from "*The American Therapist*," April, 1898. I also believe that I am the first to use it successfully in connection with a chemical fluid in the Radical Cure of Rupture.

A great number of electrodes have been devised for cataphoric purposes, some of them quite complicated, like those of Adamkiewicz, Munk and Peterson. Gold and platinum are excellent electrodes, but are very expensive. I use one of my own made entirely of glass. The results desired cannot be obtained from the ordinary sponge electrodes. It is well to prepare the skin before treatment by rubbing with ether to dissolve out the oil globules, the anode being applied on the disc containing the drug; the buttocks of the patient resting on the cathode. Poisonous medicaments, such as cocaine, do not act as well as other non-toxic local anesthetics. I was led to make a study of electric cataphoresis in my work in treat-

ing diseases of the rectum, and am happy to say have had very gratifying results from its use. As the intention of this paper is to treat more particularly of the radical cure of hernia or rupture by a new combined method of electric-cataphoresis and the use of a chemical liquid, I shall confine myself to that subject and not enlarge further upon the cataphoric action of drugs, as I trust there is, at the present day, no doubt of the truth of its possibilities.

The word *rupture* is a synonym of hernia, which is derived from the Greek, and means a shoot or scion; technically it is the escape of any viscus from the cavity in which it naturally belongs. There are no portions of the abdominal wall, except those formed of bone, which may not be deficient from congenital malformation and thus allow the viscus to escape. This can take place only through the natural openings which exist for the passage of vessels through the muscular and tendinous fibers or from disease or other causes.

First: *Inguinal*. Of which there are different forms, the most common, external or oblique, appearing at the internal abdominal ring first and after traversing the inguinal canal emerges at the external ring and descends into the scrotum in the male or into the labia pudendi in the female. It follows the course of the spermatic cord in the one and the round ligament in the other. The internal or direct hernia distends the parts immediately behind the external ring and descends through it to the scrotum or labia. Congenital and encysted hernia are peculiar forms of the oblique variety.

Second: *Femoral or Crural*. This variety passes under the crural arch, enters the crural canal, and appears at the upper and inner part of the thigh.

Third: *Umbilical*. This hernia appears at the navel, passing through the

opening, which in the fetus serves to transmit the umbilical vessels.

Fourth: *Ventral*. By openings which transmit vessels and nerves from the deeper seated parts to the integument. Any one of these apertures, when unnaturally large and relaxed, may become the seat of a hernia.

Fifth: *Perineal*. A hernia may descend between the rectum and the bladder in the male, or rectum and uterus and vagina in the female, and form a tumor in the perineum.

Sixth: *Pudendal*. In this variety the hernia descends as in the two preceding, but instead of appearing in the perineum or vagina passes into the labium pudendi.

Now with regard to the cataphoric and chemical method of treating hernia. One might predict inflammation or suppuration, but this never occurs as the preparations used can be positively forced into the abdominal cavity without fear of suppuration or inflammation—I mean inflammation as it is popularly understood. There is no heat, no swelling, no redness and no pain after this treatment. There may remain a slight tenderness on pressure over the canal. The explanation I give for the treatment is that the parts acted upon being fibrous tissue, the irritation is necessarily mild. The anesthetization of the skin is always perfect, and owing to the mildness of our preparation the irritation ceases in the earliest stage and does not increase to a real inflammation; even should it occur (owing to the nature of the chemical liquid used), the inflammation could not run into suppuration. Again, owing to the slowness with which all fibrous tissue, when irritated, recovers as well as to the powerful plastic tendency of the lymph generated, the thickening, contraction and consolidation which follow the irritation persist for an indefinite length of time and are positively permanent, enabling nature to re-

establish herself and effect a cure of the hernia.

A close study of the anatomy of the rings and inguinal canal has aided us in the conclusions. My colleague, Dr. H. A. Russell, having been a demonstrator of anatomy for years, concurs with me. He says: "As this canal, the natural opening for the spermatic cord, extends from the internal to the external abdominal rings, its back being formed by the fibrous transversalis fascia through which the internal ring has its opening, and partly also by the conjoined tendons of the two deeper abdominal muscles below the tough Poupart's ligament, also fibrous tissue, the front is bounded in part by muscular fibers from the internal oblique muscle." Thus he says: "The canal is essentially a fibrous canal except at the outer and deeper portions where there is some muscular tissue." He also adds: "Now, the result of the irritation, upon which is based the reliance of the cure, is solely in its effects upon fibrous tissue. Whatever alteration, if any, is produced in the tissues, such soon disappears."

This is truly the case; the lymph produced by the excitement has a tendency to organize into tissues similar to that which gave it birth, thus thickening by interstitial formation the whole series of fascia, contracting the rings both directly and indirectly.

No. 22 W. 34th Street, New York City,
(Next to the Waldorf-Astoria).

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We will ask Dr. Linn in a further paper to give the formula of the fluids he uses. That first employed for injection was a decoction of oak bark, and this answered well. It seems likely that a solution of tannic or of gallic acid in distilled water would be useful if employed as Dr. Linn suggests. Either would be non-irritant. In fact, if no one has as yet tried these agents the experiment should be made.—ED.

THE HOT AIR TREATMENT FOR CHRONIC DISEASES.*

By A. W. MEYERS, M. D.

IKE every other calling in life, medicine has its fads and its fashions. Every new theory expounded, every new method advanced at once sharply draws the line between the pros and cons, and no small amount of tact is required to avoid on one hand the Charybdis of enthusiasm and on the other hand the Scylla of condemnation.

That I may exonerate myself in the beginning from the charge of parading a hobby, it will suffice to state that our worthy president not only selected me for a subject but chose the subject for me—"Hot Air."

The literature on this subject is singularly meager. The latest and best textbooks treat of it very lightly or not at all. To the unsophisticated it seems miraculous that the whole or part of the body can be subjected to a temperature of over 500 degrees Fahrenheit, 300 degrees hotter than boiling water, and yet not be injured to the extent of even the smallest blister.

Shoemaker in his most recent edition says, "it is recorded of Chabert, 'the Fire-King,' that he frequently exposed himself to a temperature of 400 to 600 degrees without injury, and in the Turkish bath the temperature of the hot room is ordinarily from 140 to 160 degrees." Hot-air enthusiasts would look on the latter temperature as but slightly above the freezing point, and if every person that has borne a temperature of 500 degrees were a fire-king we would soon have more fire-kings than ice-men.

Moist heat can only be utilized below a temperature of 140 degrees, above this point it cannot be endured and causes destruction of the integument.

The usefulness of heat was recognized by the earliest therapeutists, and the diverse modes and devices for its administration are as multiform as the uses to which it has been put. Hot bottles, plates, bags, bricks, coils, baths, poultices, stupes and clysters are convincing evidences of the curative powers of heat as held by profession and laity. Everyone has experienced the exhilarating effect of a hot sand bath on the sea shore or river side. Sunshine itself is scientifically utilized in the sun-bath technically termed "heliosis."

While all these methods of heat administration find fruitful application they present a common difficulty; viz., maintaining and regulating a sufficiently high degree of heat to secure the maximum of good. Heat is a mode of motion, its physical manifestation being increased molecular activity leading to expansion. Temperature is a relative term measured by expansion and designated by degrees.

Physiologically heat acts as an excitant and stimulant, increasing the arterial tension, dilating the capillaries, raising the bodily temperature, and opening the emunctories of the skin. Pulse and respiration are both increased in force and frequency. High degrees of heat cause pain primarily but act as sedatives secondarily by reducing the electrical currents of the sensory nerves. Active perspiration caused by prolonged exposure to heat removes edema and inflammatory infiltrations, and aids in eliminating from the system abnormal constituents such as uric acid.

Increased circulation and activity promote healthy metabolism and dissolve and carry away pathological accumulations and indurations, therefore the therapeutic indications of hot air are clearly pointed out by the physiological effects. Wherever counter-irritation is required

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hot air finds fruitful application. In the category of diseases in which it has been employed with signal success are sprains, synovitis, rheumatism, gout, arthritis, neuralgia, lumbago, gangrene, phlebitis, ankylosis not osseous, in the after treatment of fractures and dislocations, indolent ulcers and infected sores, uremia and obesity. Its sphere of usefulness is daily widening and the inviting field it presents for profitable research has enlisted many progressive practitioners.

The apparatus most popularly used is that devised and made by the "Hot-Air King," Frank S. Betz of Chicago. It is made in various sizes, the largest of sufficient capacity for the entire body. The smaller ones are intended for treating arms and legs, and knees and elbows. The construction of the Betz apparatus is simple; a metallic cylinder, lined with asbestos so as to retain the heat, several devices for furnishing heat by means of alcohol, gas, or gasoline as preferred, attachments to fit various parts of the body, a thermometer indexed to 600, vents to allow the vaporized perspiration to escape, a hammock which supports the part to be treated in the bath securing equable heat to every portion. The skin should be perfectly dry and the part enveloped in a Turkish towel so as to absorb the moisture thrown off by perspiration, otherwise severe burning might result.

Patients only experience a sense of warmth up to about 200 degrees, but it is well to go slow when this point is reached. Some patients are more susceptible to heat than others and some conditions favor tolerance of greater amounts of heat. Ordinarily it is possible to give a patient 300 degrees at the initial treatment, and at subsequent applications to raise the heat to 350, 400 or even 500 degrees if necessary.

It seems a good rule to follow, to give a patient as much heat for as long a time as he will tolerate. It is advisable to subject the part treated to massage and passive motion. In many cases where it is almost impossible on account of the pain to touch the patient sufficiently to adjust the apparatus, after administering the hot bath the massage is borne with apparent relish. Treatments are given from once a week to twice daily according to the case. It is not usually necessary to repeat the operation a great number of times. In a case of phlebitis following the puerperal state, where the swelling was great and pain intense, three treatments at intervals of three days were followed by permanent relief.

A case of synovitis of knee joint, patient on crutches, was subjected twice on alternate days to 300 degrees for thirty minutes, patient went to work the following day. Sprains are frequently entirely relieved by one application. In rheumatism, acute, articular, chronic and muscular the improvement is marked from the beginning. Deposits of gout and arthritis are in a great measure removed by a persistent use of the hot air bath.

In a case of senile gangrene, under the care of Drs. Noble and Hill, where amputation of a toe had been performed and the flaps had become involved in the process, the disease subsided after three or four treatments with hot air, antiseptic dressings and active internal medication being pushed in connection therewith.

It may be well enough to state that no claim has been advanced, even by the most ardent advocate of hot air treatment, that it is a panacea for innumerable ills; but only that it is a material remedy of positive value and that for many conditions as an adjunct to the treat-

ment of many diseases both acute and chronic there is nothing which can compare with it.

Cases of obesity are reported where by means of the body-bath ten pounds of reduction was accomplished per week with corresponding improvement in general health. In uremia it is sure to supersede the old fashioned hot wet pack.

Skin diseases of parasitic or infective origin are all amenable to the hot-air treatment, since the thermal death point of the various organisms is from 105 to 212 degrees.

It has been suggested in tubercular processes. Watson says, "that used conjointly with intra-articular injections of iodoform in tubercular synovitis the heat and the dissemination of free iodine relieve the trouble after all other methods fail."

Bloomington, Ill.

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The CLINIC desires to thank Dr. Meyers for sending his most excellent paper for publication. These are principles supported by facts that should not be lost sight of. We promise you for next month a paper by Moyer, of Chicago, on the application of hot-air to the treatment of the neuroses. Dr. Moyer is able to speak on this subject and his paper is one of great interest and value.—ED.

AUTOINTOXICATION (so CALLED) FROM THE INTESTINAL CANAL.*

By H. HERZ, M. D.

 HERE are certain symptoms which proceed evidently from the digestive canal, consisting of nervous disturbances in the more restricted sense, and also in disturbances of the circulation, respiration, etc.

*Translated and slightly condensed from "Störungen des Verdauungsapparatus," by Dr. Epstein.

These symptoms were regarded for a long time as mainly "reflective." This view, though not annihilated by the recent doctrine of autointoxication, especially after the manner of Bouchard, seems yet to be energetically pressed by it to the wall.

The so-called autointoxications are divisible into two groups. The first comprises the diseases in which the poisons originate and accumulate in the innermost mechanism of the body, leading to disease and even to death, as in uremia, icterus (*vulgaris* and *gravis*), etc. To these cases would the designation of auto-intoxication belong by rights, if the diseases referred to it really came about as the numerous advocates of this view claim.

The second group is altogether different, viz., those cases where the toxic materials originate in cavities, which though they are placed within the body belong nevertheless in a certain way to the "outer world," cavities which are separated from the body proper by a layer of epithelium, as in the bladder, the uterine cavity, and above all in the lumen of the intestinal tube, with which we are here concerned. That such a poisoning is possible can hardly be doubted. A poison, let us say, is introduced, in a ready-made condition into the body, and is as such transferred into the blood; or an easily decomposable or an already semi-decomposed article of food is introduced into the digestive canal, where a similar poison will somehow be produced from that article, then while the article passes from one condition to another, there may arise yet another condition, too, which under some abnormal process of digestion in one person will prove to be a toxic substance, while another person will be able to support it unharmed.

How far, however, a great part of such poisoning properly deserves the designation "Auto" intoxication, is after all questionable indeed. At any rate, it will be going too far when a certain living or dead intestinal parasite produces poisons which reach the circulation of the blood, to speak in such a case of "self" poisoning of the organism.

Considering cases of the kind above mentioned more closely, there will arise certain doubts as to the propriety of extending too far this doctrine of "autointoxication from the intestinal canal."

The advocates of the doctrine themselves (Albu, Bergherini) state that such cases occur mostly in persons who labor under neuropathic difficulties, persons with weak nervous systems, women, children, persons who became nervously affected from certain occupations, or from some other causes. Under such conditions of the system there may indeed ensue a greater disposition to become poisoned, for the way of harm directly from the intestine by the way of an easily irritated nervous path is always the shortest and least forced one.

Furthermore, the frequently changing course of these ailments, the frequently sudden attacks and disappearances of symptoms in certain definite phases of digestion make the assumption of autointoxication in certain cases very doubtful, for generally there results a progressive form of chronic intoxication, or even a kind of habituation, when small doses of poison are often introduced into the system. Especially contradictory to the assumption of a toxic effect is the fact that the severest nervous disturbances may suddenly cease, as for instance in chronic obstipation all trouble may suddenly disappear when an abundant intestinal evacuation has taken place, for the circulating poisons in the system require certainly some time to be rendered ineffectual.

In other cases it is true that the serious general symptoms do outlast the local disturbance, for instance in incarcerated hernia when the incarceration had been released; a fact which Bouchard sought to utilize in support of his doctrine that the blood is over-flooded with absorbent putrid materials. This theory for such ailments is indeed not to be lightly dismissed, but neither is it unconditionally needed; for on the one hand, a reflex may outlast a long time the process of resolution, and again the intestine may at times be left in very seriously ill condition after the release of the incarceration, so much so that the circulation may become unfavorably affected by it reflexively, may allow the entrance of bacteria into the tissues, and cause other mischief.

How many disturbances may take place by way of reflexion is well seen in the results of dentition, where the absorption of toxins can hardly play any essential part. Katz reminds very properly in this connection of the celebrated experiments by Beaumont on his Canadian hunter, where, when he introduced the bulb of the thermometer into the hunter's gastric fistula there ensued giddiness, pallor, syncope, obscuration of the field of vision, etc., without evoking any local phenomena on the part of the stomach.

The ease, too, with which such reflexive effects ensue, contrasts somewhat with the difficulties to be mentioned further on, which poison must find in passing through the intestinal wall and liver.

To all these there comes yet the fact that the experimental bases of the doctrine of autointoxication are as yet quite weak. The demonstration of the claimed poisons was successful in but the rarest cases. That there is a toxicity in the excremental products of the urine or of the feces, or of both, for (mostly small) animals, may be true, but to draw from this the conclusion that there circulates in the blood of man, from whom the excrements

were obtained, a harmful poison, must certainly be regarded as a very hazardous assumption. The experiments so much emphasized by the French on the changed toxicity of the urine and feces, can, therefore, not be regarded as of any great importance in this question. Even if the experiments referred to were not as difficult as they are, yet considering the various contractions of the urine, its numerous chemical and morphological component parts, the over-filling of the circulation (or even air emboli) of the animals experimented upon, and many other considerations, it is evident that conclusions drawn from such experiments can be of but a very vague kind. An increase of the toxicity of the urine speaks in evidence of autointoxication, because it shows that the body is forming more poison than usual; and a diminution of urine toxicity speaks also the same way, because it shows that the body retains poisons—just as you want it. It is only very rarely that the same kind of "poison" is found in the urine and in the feces, a phenomenon which would argue for the probability that the system is flooded with the poison in question. But whether this "poison" does actually act as such, whether it is cause or effect of the disease in which it is encountered, whether it arose in the intestines and thence came into the circulation and the urine, or whether it originated elsewhere and is excreted only by the urine and intestine—all these are questions which are on the whole yet unsolved.

With these objections to the doctrine of autointoxication from the intestines—with which alone we are dealing here—it is not strictly refuted, but neither, on the other hand, can the assumption of various and complicated "reflex" effects out of the intestines be demonstrated. It is highly probable that in this principal very ancient doctrine there is imbedded

a kernel of truth, but which has yet to be shelled out very carefully and laboriously. Wherever, therefore, we shall find anyways worthy reasons for the existence of autointoxication we shall come back to it, but for the present we chose the theory of reflex action as the more convenient, and in many cases certainly the more plausible one, as the main basis in the consideration of disease phenomena in this line, yet we are ever ready to make concessions to progressive sure knowledge.

We have, therefore, to consider in detail the numerous substances which arise in the intestines through fermentation and putrefaction, through bacterial effect, and which without any sufficient reasons were accused as causes of poisoning; some of them shall be considered exceptionally.

How do these substances influence the body? The idea was here and there advocated, that they do not act by the blood, but that they irritate the nerve-endings in the intestines themselves, and cause from them out reflexively further damages. But it seems superfluous to separate for this an entire special class from the grand army of nervous symptoms which arise from the intestinal canal in abnormal and also in normal digestion, either from its working apparatus or from its contents, and besides we have in practice no possibility of making this separation.

Most adherents of the doctrine of autointoxication assume an irruption of the poison into the blood, but as possible only after the surmounting of those enormous hindrances which a normal intestinal wall and a liver present. Some ascribe to the liver the main part of that hindering action, and others again, and rightly so, maintain that the healthy intestinal wall is sufficient to hold back the damaging substances from the inside of the organism, especially those substances which are usually formed in the intestines. And

such a protection is indeed necessary, since when once the intestinal wall is broken through, then not all substances reach the liver, but part of them goes into the current of the chyle. That such an autointoxication should take place from the intestine it is necessary first of all to postulate an anatomical or functional lesion of the intestine, especially of its epithelium, if the poison present is not strong enough nor so abundant as to overcome the resistance of healthy tissues.

That the liver renders many poisons harmless has been many times reconsidered since the experiments by Schiff. According to Roger the liver does this by storing, destroying, or excreting the poison, and this its function—often designated as "Retentive power"—is said to be bound to the amount of glycogen in this organ. Other authors, however, came to the conclusion, that the neutralizing property of the liver in reference to various poisons is not more pronounced than that which other organs too possess. In fact, this property of resisting unorganized and organized poisons up to a certain point, is one which belongs very generally to all vitally strong parenchyma, and of course to the liver, too. It is indeed possible, too, that the liver, just on account of its disposed situation to the inflowing substances of the external world, is more often engaged in such action, and is perhaps especially fitted up for it. But the evidences for this are given by neither the questionable results of the experiments made on animals nor by the observations made on the human being. It is true that numerous examinations have proved an increase of toxicity of the urine in various patients with diseases of the liver—a decrease of the same in such cases, is said to argue a contemporaneous insufficiency of the kidneys—but, as was said above, the interpretation of this symptom, here made still more difficult by the trans-

sition of biliary constituents into the urine (poisonous eventually for animals), is a very doubtful one. Presupposing that the transport of the main portion of the poison goes by the portal vein, then in order that an autointoxication should take place, the more or less strong walls of the liver must at all events be broken through, which in a certain state of the liver's insufficiency may of course happen very easily.

In passing let it be mentioned that in autointoxication proceeding not from the digestive apparatus, here, too, there is ascribed to the liver the role of "detoxication." In reading some writings the impression forces itself decidedly upon one that the body even in its normal state is an enormous laboratory of poisons, and that the struggle with these toxins is the most important activity of the organs, especially of the liver; if this activity is paralyzed, then a self-poisoning may take place as well as when too great quantities of normal poisons are formed, or when abnormal poisons originate. All these assumptions need yet most urgently the support of a material for observations, against which no objections could be made. Far more simple appears the conception that the integrity of the blood is only then guaranteed when the chemical activities of all the organs, especially of the glands, normally co-operate together; and when there is a deficiency of an important transmutation, say, e. g., in the liver, or in the pancreas, whose excretory function is only of secondary rank, then the further elaboration of important materials stagnates, and other parenchyma, e. g., the nervous system, can no longer perform their work undisturbed.

The doctrine of the "detoxicating" property of the liver is for the most part connected with more ancient doctrines. We need only remember that numerous cases which are at present considered as autointoxication, passed among older au-

thors as cases of biliousness or functional hepatic disturbance, and were regarded as consequences of a diminished secretion from the liver, though, of course, they thought then mainly of a diminished excretion of the biliary constituents which was assumed to be performed in the blood.

We need not enter upon the symptomatology of the autointoxications which proceed from the digestive apparatus. These refer in part to digestive disturbances of various kinds, bad taste, lack of appetite, nausea, eructations, vomiting, diarrhea, constipation, gastric and abdominal pains, colics, etc. All these have hardly anything characteristic in themselves, and cannot be distinctively separated from the primary gastro-intestinal affections which caused the autointoxication, and in doing this we would have to construe a great series of phenomena in the various apparatus, especially of the nervous system, and which will be treated of in detail in special chapters.

It is only a few forms of autointoxication that need a closer consideration, those namely which are distinguished by a definitely found characteristic poison, and by a matter of fact basis.

—:o:—

The opposition in some high quarters to the doctrine of intestinal antisepsis leads some to believe there may be some objections to it that have not come into general circulation. We have therefore requested our erudite friend to search the recent files of Europe's greatest medical journals and extract anything on the subject worth reprinting, whether it favors our ideas or not. In accord with this we present the second installment, that of Herz. More will follow if found worth reprinting. We fancy our readers will find Herz pretty difficult to be convinced, his objections calling for rebutting evidence rarely obtainable in such cases. Yet he deserves careful consideration, and

the testimony should be weighed carefully.—ED.

THE ENDOMETRIUM.

BY BYRON ROBINSON, B. S., M. D.,
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of Gynecology and Abdominal Surgery; Pro-
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and Illinois Medical Colleges.

(SECOND PAPER.)

THE cervical endometrium is more solid and much thicker than that of the body. It is pale white. It contains more connective tissue than the corporeal endometrium. On the anterior and posterior median surfaces is an elevation, the plicæ palmatæ, or arbor vitæ. The plicæ

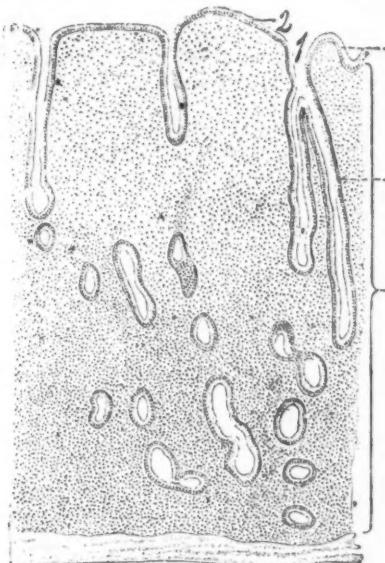


FIG. 6A.
BOHM AND VON DAVIDSON.
CORPOREAL ENDOMETRIUM OF A YOUNG
WOMAN, X 35 DIAM.

It is in the intermenstrual or resting phase. ¹, mouth of a bifurcated utricular gland; ², superficial epithelium of the endometrium. Other glands are distributed in the cut, showing different sized lumens, as cut at different angles to its long axis. The inter-glandular tissue appears rather excessive in this cut, presenting irregular and defective development of the endometrium; also the section might have been taken in a defective portion or one once affected by a limited inflammatory process.

radiate toward both sides, generally obliquely in the proximal part of the cervix and transversely in the distal portion. The elevation is larger at the distal end, smaller toward the proximal end. It resembles in outline a pine tree, hence the term *arbor vitae*.

The endometrium of the cervix is thus divided into four columns. It presents in children a similar system of folds and furrows, in infants the *arbor vitae* extending to the fundus, gradually disappearing from the corpus uteri during childhood and becoming stationary at puberty. The

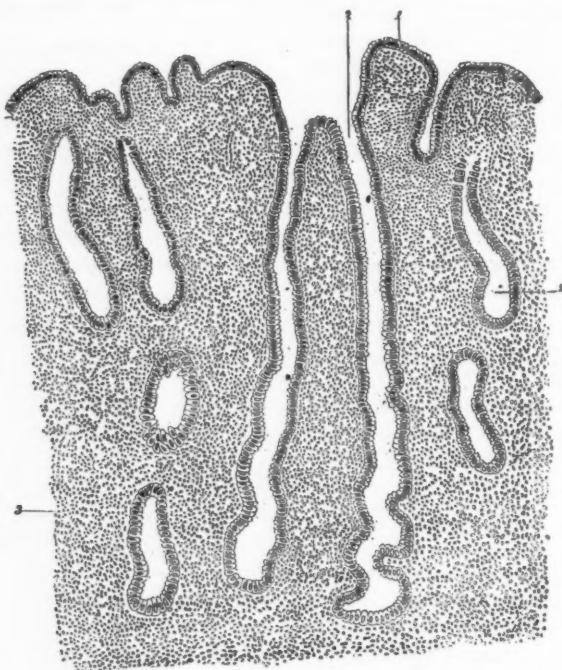


FIG. 7. (W. NAGEL.)

Represents the normal corporeal endometrium, *i. e.*, utricular glands and interglandular tissue.

1, superficial epithelium, single layer, ciliated columnar cells; 2, uterine glands lined by columnar ciliated epithelium; 3, interstitial or interglandular tissue. Note the uterine glands are differentiated from those of the cervix by, a, uniformity of lumen and distribution, b, no secondary digitiform evaginations, c,

the thin, non-gelatinous, non-tenacious mucus of a minimal quantity, and also the proportionately large mouth and relatively small gland lumen. The nucleus of the epithelial cell of the corporeal utricular gland is located in the center of the rich protoplasmic body. This excellent cut shows a nulliparous endometrium undisturbed by parturition, *endometritis glandularis* or *interglandularis*.

free surface is covered by a single layer of long, thin, cylindrical, ciliated epithelium, which is a direct continuation of the corporeal epithelium. The cervical epithelium passes directly into the cervical glands, which are irregular digital depressions one-tenth inch in depth and one-twentieth inch in width, having a basement membrane bearing cylindrical

ciliated epithelium. The cervical glands have broad branches displaying secondary depressions, so that on section parallel to the long axis of the glands the epithelial outline presents an irregular saw-like appearance. The distal end projects into the muscularis. They secrete a transparent, tough, stringy mucus similar to that of the nasal mucosa. A plug of this

mucus always fills the cervical canal during pregnancy.

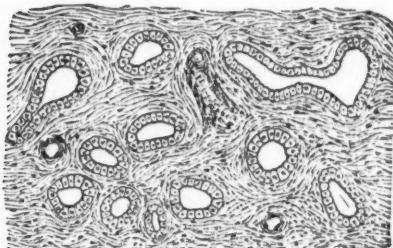


FIG. 8. (ORTHMAN.)

NORMAL CORPOREAL ENDOMETRIUM.

Transverse section from the corporeal endometrium. The glands are not quite uniformly distributed and some are cut at oblique angles. Though Orthman presents this as normal endometrium my experience would pronounce it a slight endometritis interglandularis, as the interglandular elements are undoubtedly abnormally prominent, and besides the utricular glands show some asymmetry from cicatricial constriction by interglandular connective tissue.

The cervical and corporeal glands gradually merge into each other. The former are apt to become closed at the mouth by plugs of mucus, which transform them into retention cysts, projecting above the surface between the plicae palmatæ and also in the surface of the portio vaginalis. The prick of a lancet evacuates them. These cysts are known as the Nabothian follicles, because Martinus Naboth, an anatomist of Leipsic, in 1707, described them as ova gliding out of the uterus.

Ordinarily, with a speculum in the vagina the cervical endometrium cannot be seen; but occasionally through trauma or congenital deviation it may grow over the vaginal portion or become everted and visible. The line of demarcation between the epithelium of the cervix and the flat, squamous epithelium of the portio vaginalis is the external os. In non-traumatic os, where the cervical epithelium grows distalward on the portio vaginalis, it is called "physiological ero-

sion." In such cases one observes red patches or streaks elevated or de-



FIG. 9. (SCHAFFER.)
SECTION OF NORMAL CORPOREAL ENDOMETRIUM NEAR FUNDUS.
a, superficial epithelia; b, b, b, uterine glands;
c, interglandular connective tissue; d, muscular tissue
(myometrium). Observe that the utricular glands

THE ALKALOIDAL CLINIC.

penetrate the myometrium, or the muscular tissue bundles pass upward among the utricular glands. There is no submucosa, and this is the reason that myometritis immediately follows endometritis. The utricular glands vary in size and distribution because of the obliquity of section to axis of gland, and because the knife occasionally cuts only the sinuous bulgings or projections of the glands. In this cut there is an unusually marked blending of myometrium with endometrium, demonstrating the absence of subendometrium (submucosa).

pressed from the adjacent surface, radiating from the external os, bleeding easily on irritation, taking infection readily, and sometimes being mistaken for incipient malignancy.

The cells of the cervical endometrium are longer, thinner, and narrower at the base, where the long nucleus exists, than those of the corporeal endometrium. They appear more transparent and the protoplasm colors slightly. The cervical epithelia present a palisade-like appearance. Beaker-shaped cells arise. The demarcation is distinct between the endometrium and the muscularis; the cervical endometrium is thicker than that of the body, its ground tissue having more fibers and fewer round cells; it possesses a plica palmata on its anterior and posterior surfaces, the ribs of the anterior lying in the depressions of the posterior, and *vice versa*. The glands are wide, irregular, with lateral evaginations of various sizes, emptying into the furrows of the plicae.



FIG. 10. (DE SINETZ.)

CILIATED COLUMNAR EPITHELIUM OF THE ENDOMETRIUM.

a, nucleus; b, nucleolus; c, body of the cell; v, cilia of the cells. The three non-ciliated cells close together are beaker cells. The upper three ciliated cells appear to be from the corporeal endometrium, because they are relatively short and thick. The nucleus is in the middle of the body of the cell, and they are well provided with rich tufts of cilia, which whip the thin corporeal secretion distalward, making a fluid stream that drains debris.

The cervical glands are not arranged regularly like the corporeal. The former are tubular, compound or racemose. Tubular glands are few, the great majority consisting of irregular sac-like invaginations of the endometrium. From the main crypt-like depression primary, secondary or even tertiary branches may arise. The secretion can scarcely be washed from the surface. Frequently in healthy women a transparent mucous string can be observed, one-quarter to an inch long. This is protective, obstructing infective invasions.

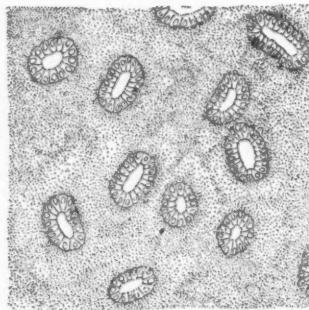


FIG. 11. (DUDLEY.)
GLANDS OF NON-CORPOREAL ENDOMETRIUM.
SEMI-DIAGRAMMATIC. TRANSVERSE
OR SURFACE SECTION.

The utricular glands are not uniformly distributed, suggesting possible endometritis glandularis and irregular cicatricial contraction displacing uniformity.

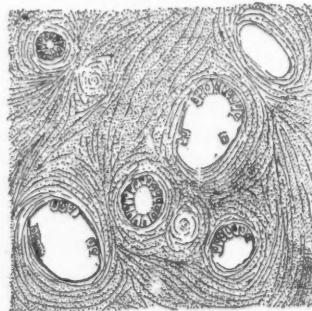


FIG. 12. (DUDLEY.)
ENDOMETRIUM AS MODIFIED BY INTER-
STITIAL ENDOMETRITIS. SEMI-DIA-
GRAMMATIC.

The connective tissue is increased, glands crushed out or changed into retention cysts. The glandular epithelium is partially or wholly desquamated.

The cilia of the cervical epithelium strike towards the os externum. They are said to disappear about the middle of the cervix, as do the genuine utricular glands, the cervical lacunæ or glands replacing them to the os externum. As the cilia disappear the cylindrical cells shorten, until the external os is covered with flat cells. The cervical glands are closer together than those of the body, and are usually filled with mucus and desquamated epithelium. They share chiefly in the menstrual process by increasing the secretion.

While the corporeal endometrium can be easily scraped off, the cervical endometrium is quite difficult to cleave from its bed of myometrium. There is no subendometrium. Numerous small muscular bundles project from the myometrium into the endometrium, so that they are so intimately dovetailed that a division is not possible with scalpel or curette.

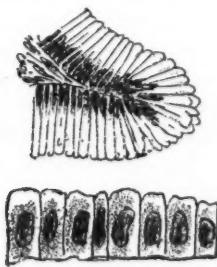


FIG. 13. (GEBHART.)

EIGHT CYLINDRICAL EPITHELIAL CELLS FROM THE CORPUS UTERI.

Observe that the nucleus lies in the center of the cell, and is proportionally large like the cell. The upper cut is cervical epithelium, long and slim, the nucleus at the distal or fixed end. The cervical cells are regular, transparent, with the nucleus farthest from the free end, and present beaker cells. The characteristic differences are well shown in Gebhart's cuts. The cervical epithelium represents a palisade arrangement. The corporeal epithelium represents a brick wall arrangement.

Neither is the line between the cylindrical cervical epithelium and the flat vaginal cells very clear. The distal end of the cervix may be devoid of glands and those present are shallow. Sometimes glands are not found till the cylind-

rical cells are numerous. The lumen of the glands is irregular, sometimes closed by pressure of the stroma. Cilia can only be observed as a rule in fresh specimens, taken directly from the patient and placed in physiologic salt solution, when by the addition of KHO the cilia may be stimulated to action.

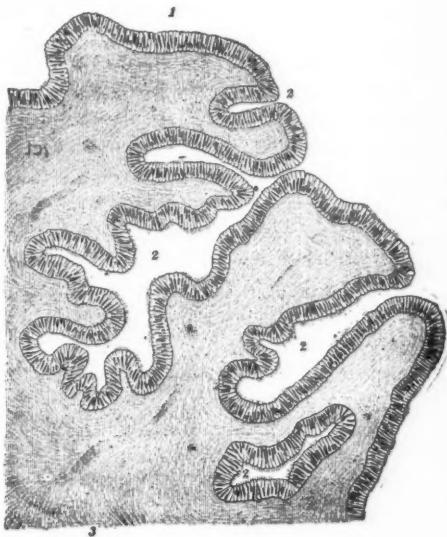


FIG. 14. (W. NAGEL.)

THE NORMAL CERVICAL ENDOMETRIUM.

1, superficial epithelium; 2, 2, glands; 3, interglandular tissue. Note the digitiform depressions or secondary protrusions of the walls of the glands.

The stroma of the cervix consists of connective tissue rich in cells, and lies just under the epithelium as a superficial layer; for the principal part of the cervical wall is the musculature, into which the fundus of the cervical glands projects. The cervical glands may be perpendicular to the surface or parallel to it. Hence the section may present various shapes and sizes of the lumen. A series of sections is therefore necessary to trace a gland to its end. Care is required, as in the cervix the two kinds of epithelium, flat and cylindrical, lie adjacent. These appear to wage war on each other, the final victory going to the

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cylindrical. Irritation of either at the external os appears to produce a lively growth, often resulting in abundant gland formation. Sections of the cervix differ greatly as they are made parallel with or at right angles to the surface. Normal tissues must be judged by the relations of the epithelium to the adjacent stroma and utricular glands. Pathogenic growths disturb the normal relations of tissue strata. As sections are oblique, transverse or perpendicular, the gland will present a sac, a circle of epithelial cells, or, as sliced in various directions, different sizes and shapes. The course is never so straight that a section will divide it from mouth to fundus, as the glands are often sinuous, spiral, sacculated or evaginated. If cut near the fundus the epithelium may resemble a new growth from the heap of new cells. Normal anatomy must show, however, uniformity of cells and glands like a honeycomb. Between the epithelial cells frequently appear small round cells which cloud the picture and make diagnosis difficult, erasing the clear-cut glands that aid so much in recognizing carcinoma.

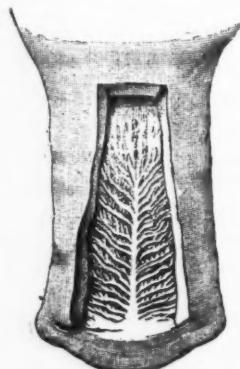


FIG. 15. (W. NAGEL.)

A FENESTRAL SECTION IN THE WALL OF THE CERVICAL CANAL.

This shows the plicæ palmatae (arbor vitæ). Observe that the ribs radiate obliquely parallel to each other and diminish in size proximally. The cervical system of mucal glands is well represented, dividing the cervical canal into four columns. In early development these cervical folds extend to the fundus uteri.

In cases rendered difficult by inflammatory and other processes distorting the normal structures of the cervical endometrium, the best help is from serial sections whence the course of the glands and condition of the adjacent serosa may be studied. The division of the cell nucleus should be carefully noted in the serial sections. However, it is only by the continual use of the microscope that one can differentiate the phantom picture from the pathologic process.

The surface of the portio vaginalis appears through the speculum as a moist, shining, bluish-red mucosa, continuous with the vaginal mucosa. A section snipt out would show normally under the microscope. It is otherwise when the smooth cervical mucosa is interrupted by a highly red uneven patch, bleeding easily when touched, generally near the external os, above, below or level with the surface. A section may show simple cylindrical epithelium where there should be flat. This is termed erosion, and does not indicate loss of epithelial tissue. The cylindrical has displaced the flat epithelium. This should be borne in mind when making a microscopic diagnosis of sections of the cervix, or of the vaginal mucosa covering it.

To illustrate the value of microscopic diagnosis: Dr. W. E. Holland brought me a patient some time after a vaginal hysterectomy for supposed cervical carcinoma. In the vaginal cicatrix appeared a round, red, strawberry-like swelling that bled easily on touch. I snipped out a small piece, which on microscopic examination proved to be simply the isthmus of the oviduct, showing perfectly the tunica mucosa, muscularis and serosa, which had become fixed in the cicatrix. She was spared another operation.

Another patient was brought me by Dr. Bingley. A diagnosis of carcinoma of the endometrium had been made from five months of hemorrhage and other

symptoms. However, curetted fragments of the endometrium showed positively a typical interglandular endometritis. This saved her from hysterectomy.

Cervical erosion can easily be mistaken for carcinoma unless microscopic diagnosis disproves it. In erosion there is no loss of epithelium, simply displacement,

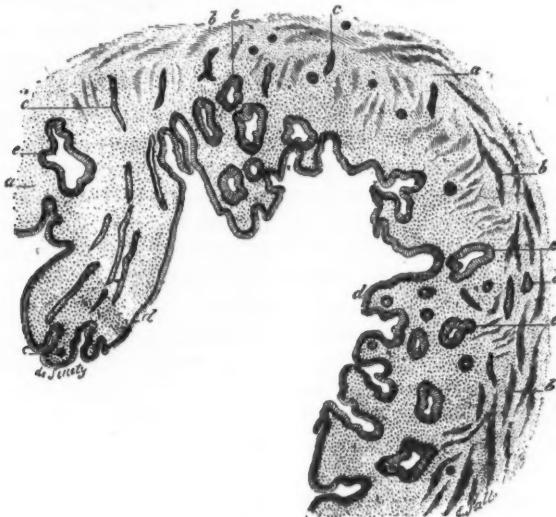


FIG. 16. (DE SINETY.)
NORMAL CERVICAL ENDOMETRIUM, XL
DIAMETERS.

a, a, interglandular tissue; b, b, section of muscles and adjacent tissue; c, c, c, section of vessels; d, d, superficial ciliated epithelium, single layer; e, e, e, section of cervical glands. Note how the surface of

the cervical endometrium gradually invaginates into the sacculated glands; the non-uniformity of caliber, lumen and distribution of the glands; the variable size of the mouth; the long slender cells.



FIG. 17. (SKENE.).
CERVICAL ENDOMETRIUM.

It shows the oblique ramifications of one of the four columns of the cervical canal of a nullipara (virgin).

It presents quite well the plicae palmatae. The surface is very regular.

with scarcely any change in the stroma except perhaps small-cell infiltration. One finds almost regularly in the stroma

gland-like structures lined by cylindrical epithelium lower than that of the cervical glands, and rarely ciliated. If few glands

are found it is termed erosio simplex. If the new-found glands penetrate more deeply into the stroma and still reach the surface, forming papillary structures, it is called erosio papillaris, which is an advanced stage of erosio simplex. If the mouths of the glands become obstructed it may be called erosio follicularis. In short, erosion is a condition in which the flat epithelium of the vaginal mucosa is displaced by cylindrical epithelium; the latter grows into the cervical stroma and forms structures more or less gland-like. The stroma is at first infiltrated with small round cells, disappearing later and leaving the epithelium alone to tell the story.

The etiology of erosion of the cervix is unknown. It may be caused by irritating cervical secretions flowing over the flat vaginal epithelium, macerating it, and permitting the cylindrical epithelium to replace it.

From my experience of fifteen years of special gynecologic labor I am convinced that many uteri are sacrificed wrongly, on account of the presence of benign erosions. Many operators mistake benign erosions for carcinoma and perform hysterectomy.

100 State St., Chicago.

(To be continued.)

PRACTICAL HINTS FROM DAILY EXPERIENCE.*

By W. C. ABBOTT, M. D.

"MIXED INFECTION" AGAIN: CAUSATION AND TREATMENT.

LAST month I had something to say in this department about "Mixed Infection," and I shall keep harping at it until you get sick and tired of the thought or until we get wide awake to its importance. Only yesterday afternoon I was called fifty miles into the country to see "a very sick

man." I found a naturally strong and robust German bed-ridden, weak and emaciated, with no fever but expectorating from a teacupful to a pint of purulent material every twenty-four hours, and with a history of having expectorated increasingly for twenty years. This expectoration comes up in great mouthfuls, from one or two tablespoonfuls at a time, and resembles the discharge of an abscess cavity. It is thrown off this way every one-half to two or three hours, and the odor is oftentimes exceedingly offensive. Examination showed that the right lung was the principal offender; the bronchi are much dilated but no cavities were found.

Laboratory examination, on my return, showed that the expectoration contained almost all the germs known to "mixed infection," with the pneumococci prevailing, excepting the bacillus tuberculosis. The explanation of the condition is, then, that this man had a pneumonia twenty years ago which did not go through resolution and finally broke down with the formation of pus in which bacteria have been developing ever since. His bronchi are sacculated and he is dying of "old-fashioned consumption" but not of tuberculosis. Every tissue of his body is relaxed and weak; he is discouraged and will probably die, although with courage and proper treatment to establish reconstructive changes and stimulate and support vitality he would have a fair chance to recover.

These cases exist on every hand; not usually as marked as in this particular instance, but they are there just the same. Repeated epidemics of La Grippe have made thousands of these cases and unless the medical profession recognizes them and appreciates exactly what the conditions are and what to do, they will just go on and linger and fail and die, the alarming mortality of consumption being materially increased thereby.

Without tuberculous infection, if the case is reasonably recent and there yet exists a sufficient basis of vitality on which to work, the prognosis is good. I have repeatedly outlined the proper course to pursue, not only in these pages but in thousands of personal letters written to inquiring and anxious medical friends during the past five years, and I would but re-emphasize at this time. Anything that can be said in general is of course a mere outline. Every patient must be treated according to conditions. We can give the framework but the physician and attendants must supply the filler.

Of first importance comes exercise, both general and of the lungs themselves—deep, forced respiration frequently repeated and exercise that will make the heart work and the blood circulate forcibly through its proper channels to carry nutrition to the dying tissues and take the rapidly accumulating waste away. This can be aided by strychnine, the best salt being the arsenate, which should be given in good dosage several times daily. It will not only stimulate the circulation but it will, especially if given in solution, stimulate the appetite and improve digestion,—a most important desideratum. To give an additional flush to the capillaries and promote elimination into the alimentary canal, three granules of "Dosimetric trinity" should be given at bedtime. This large single dose of aconitine, aided by the relaxation of sleep and the warmth of the bed, dilates the capillaries and allows the waste to be washed away by the blood-stream and the lymphatics, the action of which is forcibly increased by the accompanying large, single dose of strychnine and digitalin which go to form the triad.

The next morning a sufficient dose of Saline Laxative will wash this waste out of the alimentary canal, accompanied by the multitudinous debris accumulated

therein from other sources (the decomposition of which produces an autotoxemia that is a constant menace to the vitality of the patient) besides flushing the kidneys and increasing the flow of urine for twenty-four hours. To help nature in her efforts toward repair and necessary elimination, Nuclein comes first. It should be given hypodermically, five to twenty minims in a syringe full of warm water every two or three days, preferably at night. It is a most marvelous agent when properly applied and fully appreciated.

As local treatment, measures to favor expectoration and to prevent decomposition of the exudate are essential. The fumes of steaming vinegar are one of the best expedients to thin and help throw off the secretion. Expectoration may be favored by the internal administration of scillitin, emetin, sanguinarine, etc., but the cough, excepting as it becomes distressing, should never be interfered with by measures tending to repress it, because it is very essential that the material be unloaded as fast as it accumulates. Among the better measures to prevent decomposition in the air cells and spaces and in the tissues of the lungs themselves, the granules of calcium sulphide and iodoform come first; two or three grains of each should be given daily in divided doses so as to keep the smell of the eliminating drugs on the breath at all times. If the cough becomes distressing and is really excessive and tiresome, minute doses of codeine or cicutine may be used to advantage, but ordinary opiates and other depressants should not be used under any circumstances. Weaving into this outline such a filling as is rendered essential by the surrounding conditions and the peculiarities of particular cases, improvement and ultimate recovery is practically assured.

It has been my personal pleasure to carry to recovery many such cases; some even

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after quite serious infection by the bacillus tuberculosis had occurred, while the cases that had existed too long or were not imbued with the necessary will power to carry out the treatment and push themselves to recovery, and others whose vitality was already wasted, have died. But the nearer we come to real appreciation of the cause and condition of these cases, and the nearer we come to carrying out a rational line of treatment, the better will be our success.

The purpose of these paragraphs is but to stimulate research and an expression of thought and experience. Early in the fall we shall devote an issue of the CLINIC to "Tuberculosis and allied Infections"; with your help and co-operation, we hope to make it something worth while, and to add our mite towards stimulating the necessary endeavor to stem the tide of destruction which follows in the wake of these infections.

SATUREIA HORTENSIS.

Since the publication of the letter from Dr. Jergensen of Horicon, Wisconsin, in a recent CLINIC, in which he mentions Satureia Hortensis as a remedy for suppressed menstruation, we have been flooded with inquiries for information regarding this drug, as well as with requests for supplies. We regret to say that we know nothing further of the plant or its therapeutic applications than the mention by Dr. Jergensen referred to. The common name of the plant is summer savory with which, under this garden name, you are no doubt all familiar. It can be obtained in fluid extract of P. D. & Co., and others at about one dollar a pint and of Allaire Woodward & Co., in pressed or powdered herb at something less than fifty cents a pound. Dr. Jergensen writes us that he prepares the drug for his own use as follows: He cuts the plant when in flower, chops it while fresh into small pieces, packs it in a per-

colator, saturates it with boiling water, macerates for two hours and then draws off the liquid adding boiled water until it is delivered through the percolate clear. Then he evaporates this watery solution until a solid is obtained, and this he dries and powders and gives in half-grain doses, several times daily, or as required.

Little more can be said on this subject. The doctor's observation is food for thought and we trust that our readers will profit by it to the extent that they will investigate further and report through the columns of the CLINIC. If the remedy is of greater value than others of the same class we want to know it, but do not write Dr. Jergensen unless you really have something to say of importance. The good doctor has been worked and worried almost to death already by the letters of inquiry that have come to him since he wrote his letter to the CLINIC, and says he'll never dare to write again.

We may remind our readers that very similar properties to those claimed for summer savory exist in the common water pepper, polygonum hydropiper. We wish that some of our doctors who have time to spare would investigate this and other native plants as faithfully as Norwood did veratrum. Here is a chance to send your name down to posterity for the good of humanity.

HOW TO BEGIN THE USE OF THE ACTIVE PRINCIPLES.

Scarcely a day passes when I am not asked many times how to begin the use of the active principles. The only way to begin is to begin. Assuming that the inquirer is an educated physician, the first thing to do is to subscribe for the CLINIC get with it the premium case and have this case filled with such active principles from the list of thirty in our "Premium Order-Blank" as the doctor is most familiar with. With this, as supplemental and especially devoted to alkalometry,

the applicant should have "Shaller's Guide" and the writer's "Brief Therapeutics with Clinical Application," as constant companions, and suggestive of the proper application of the newer idea. Then he should go to work to apply the remedies that he has selected to the best of his ability, expecting a varying proportion of both good and bad results—the proportions changing to good just in so much as he becomes familiar with the tools and expert in using them.

One must not expect to be able to change from polypharmacy with its uncertainty, to Alkalometry and its certainty, without painstaking, patient study and effort. He must work out his own salvation, but the result is worth ten times what it costs.

ACONITINE—THE PRESENT OUTLOOK.

About four months ago we were appalled by the information from abroad that the aconite crop this spring was a failure, and therefore that the supply of aconitine amorphous was very limited and could not be replenished. This of course has raised the price of aconitine in this market and will hold it up (with sooner or later nothing to be obtained at any price) until another harvest. Recent advice from two of the largest chemical houses abroad is to the effect that there is no change for the better. As soon as there is a change our readers will be notified; meanwhile, we are fortunate in having a sufficient supply at our command to meet professional needs. Aconitine is a wonderful remedy, of which the half even yet has not been told.

A NEW STATIC MACHINE.

We have just had the pleasure of examining a static machine, made on an entirely different plan from the ordinary, by Frank S. Betz & Company. It is unquestionably going to do away with many of the objections to static machines and will enable us to make a more extensive use of this most desirable means of applying

electricity to the treatment of disease. By special and original mechanical devices all the plates are made to revolve, half one way and half the other; electrical leakage is eliminated and the effect of dampness is reduced to a minimum, the resultant being claimed by the manufacturers to be twice the amount of electricity generated by any other machine with the same number of plates, and the same always under perfect control. This is yet to be demonstrated and you are the judge. There are many good machines on the market with which this new machine must compete; if it will do what is claimed for it, there is no question regarding its future.

COMMON EMMENAGOGUES.

In a personal letter to the editor Murrell calls attention to the valuable properties of senecio, or rather of its alkaloid senecionine, as an emmenagogue, acting much as Dr. Jergensen found satureia to do. In the Southern states gossypium is much employed by the negroes for this purpose, while sassafras is held in repute wherever it is found growing. The question arises, do these plants depend for their efficacy on an alkaloid, glucoside, or a volatile active principle that is lost in the ordinary chemical manipulations? How I wish I were a country doctor with time on my hands! I would at once invest in a work on the extraction of alkaloids, a little apparatus, and see if I could not transmute the wild weeds of my neighborhood, with some of my time, knowledge and labor, into gold. Now is the time to investigate our native aconite when the European supply has failed.

Is it hard to make a living in this world? Nonsense! There are numberless opportunities surrounding you, dogging every step you take, if you would but see. But you walk among them like a blind man.

Ravenswood, Chicago.

Miscellaneous Articles

SEPTICEMIA.

Editor Alkaloidal Clinic:—

T., aged 55, stout, well-nourished, school-teacher, family history unknown, bachelor, good health so far as known. On April 27, 1900, his scholars were vaccinated by order of government. T. himself volunteered for the operation. He was vaccinated in two places on the left arm, new needle and Lancaster County Farm vaccine used; twenty-five other vaccinations made at the same time did well.

May 4, vaccination inspected; two well-marked vesicles with slight halo, no swelling of arm, no pain, no enlarged glands.

May 10, 3 p. m. T. came to my office, complaining of headache, anorexia and chill, said he had been out in cold wind; temp., 99.2, pulse, 100; examination otherwise negative. I prescribed a simple diaphoretic, directed him to go to bed at once, and if not better in morning to let me know.

May 11, 12, 13, T. was up and about. He complained to others that his appetite did not improve, but declined to come and consult me.

May 14 he came to my office about noon, looking very ill, with dirty sallow complexion, anxious expression and unsteady gait. His arm was paining him. It showed two dry scabs, but no heat,

swelling, redness, or œdema, but well-marked purpuric discoloration extending from a little above the scabs to below the bend of the elbow, on the interior, outer and inner surfaces of the arm; no enlarged glands in neck and axilla. On asking where the arm pained him, I could get no satisfactory answer. Temp. 103, pulse 120, resp. 30. Examined chest but got no definite sign; urine high-colored, acid, no albumen; tongue furred. T. told me that under the advice of a friend he had been taking large doses of quinine and had purged himself severely the last three days. I sent him in charge of a friend down to the hotel where he lived, with orders to go to bed at once. Only negative signs were gotten.

Diagnosed profound septic intoxication and decided to give Nuclein (Aulde) a full trial. Injected twenty drops hypodermically, and repeated ten drops every two hours that night. Diet, milk, beef tea, Bovril, white of egg, 1-2 oz. brandy every hour. At 5 p. m. temp. 103.5, pulse 130, resp. 38.

May 15, 9 a. m., temp. 103.2, pulse 118, resp. 38; some quiet delirium, but was rational at intervals. Gave Nuclein, five drops every two hours. At 3 p. m. worse, getting into typhoid condition, tongue dry and caked, low muttering

delirium, prostrate, temp. 103.2, pulse 130 and fluttering, resp. 40. Added strychnine gr. 1-30 to five minimis nuclein every two hours; doubled brandy. At 10:30 p. m. very prostrate, constant delirium and subsultus tendinum, passed water under him. Increased strychnine to gr. 1-15 and nuclein to ten drops; doubled brandy.

May 16, 2 a. m., apparently *in articulo mortis*. At 7 a. m., marked improvement, temp. 101.8, pulse 115, more regular and stronger, no delirium. Noon about the same; temp. 102.6, pulse 120. At 3 p. m. temp. 103.6, pulse 120; slept 2 1-2 hours, took nourishment well. Reduced brandy to 1 oz. every hour. At 6:30 p. m. temp. 102.4, pulse 120, some fine crepitation heard in left apex, moist rales over both bases. At 10 p. m., temp. 104, pulse 120, resp. 45, drowsy.

Things went on without much change, till the morning of the 17th. Plenty of nourishment was taken, and nuclein, strychnine and brandy as last indicated. May 17, 7 a. m., temp. 101.2, pulse 115 and stronger, resp. 32, but embarrassed by accumulation of phlegm in tubes; abundant moist rales all over the chest. Gave emetin gr. 1-67 every fifteen minutes for a couple of hours. At 11 a. m., temp. 105.4, pulse imperceptible, resp. 45, very bad. At 4:30 he died.

I suppose there is little doubt that the case was one of septicemia, and doomed from the first. Indeed my own opinion on the 14th, judging more from the general appearance of the patient than anything else, was what I had an undertaker's job on hand. The great question is, whence did the infection arise? Was it directly attributable to the vaccination or not? I should have liked further advice, but am sixty miles by road from another doctor. I have been very particular to give correct dates of vaccination, etc., and these may be relied on, showing that many days

had elapsed since the vaccination, before any untoward symptoms occurred.

A. M. SUTTON, M. D.

Nicola Lake, B. C., Canada.

—:o:—

That the septicemia did not result directly from bad vaccine is evident, as twenty-five others were vaccinated from the same lot without any bad effects. A vaccination wound is just as liable to become infected with septicemia as any other wound, and this is what has occurred in this case. We cannot too strongly urge the importance of first rendering the skin aseptic as before any other surgical operation, then performing the vaccination aseptically, and finally sealing up the wound until it has completely healed. Otherwise there is always the possibility of septic infection, and in rare cases this will occur as in the present sad instance.

The treatment failed. The use of brandy is not, we believe, justified by the present views. Calcium sulphide to saturation would, we believe, have been advisable; with Marmorek's Serum if, as seems likely, this was a streptococcus infection. The failure of Nuclein (Aulde) was distinct and unmistakable. It is possible that the application of pure carbolic acid to the original point of infection might have broken up a nest of virulent pathogenic micro-organisms. In septic abscesses secondary to such an infection the destruction of the original disease-focus has proved effective, even when many collections of pus existed in secondary foci. The case is open for further comment.—ED.

MEMBRANOUS DYSMENOR- RHEA.

The *London Lancet* of October, 1899, says that a Hungarian medical journal publishes the fact that hydrastis cana-

densis (golden seal) cured a most obstinate case of this most obstinate disease. My notebooks show that Dr. H. E. Stroud, of Oceanside, Cal., cured a case by accidentally salivating a patient with calomel, and I have heard of two or three other cases cured in the same way. Last year I either entirely or nearly cured a case of fifteen years' standing by giving eight drops fluid extract golden seal together with 1-48 grain corrosive sublimate three to four times daily after meals. It did not salivate. Used the remedies three or four months. Towards the last stopped the hydrastis as it checked the hitherto excessive hemorrhage too much, but continued the sublimate. I believe they are curative.

V. E. LAWRENCE, M. D.

Ottawa, Kans.

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See editorial on the alkaloids of golden seal in June CLINIC, and tell us which does the work in dysmenorrhea. Probably it is hydrastine.—ED.

ALNUS RUBRA.

To test the therapeutic value of a remedy sometimes an extensive field of investigation opens up to us. In testing a vegetable remedy especially there are many important things to take into consideration. We must be certain that the drug has been collected at the proper season in the year, and that the proper part of the plant is used, then we are ready to inquire what medicinal qualities the drug has.

One sad fact appearing before us as we look over the past, is that many a drug that has some virtue has been lauded as a "cure-all." Physicians reading of it have purchased some cheap imitation, and because it failed have condemned the drug. While the one who introduced it, it is true, may have made

extravagant claims, nevertheless the drug was of use in certain conditions, but from neglect of the essential laws governing the administration of drugs it drops into obscurity.

What is needful is a closer study of our plants. We have many vegetable remedies yet to be investigated, many that call for re-study. We should make a special effort to discover the direct action of the drug, so as to apply it accurately to meet pathological processes. "The virtues ascribed to medicines are so multifarious, and if we are to believe reports of different writers so positively contradictory, that it requires the soundest exercise of judgment, with no small share of experience, to decide what are really the effects of medicines upon the living system, and how they may be rendered available in the cure of disease."

Why do we have so much difficulty and why do so many doctors differ? For the reason that cheap drugs are used, the plants are not collected at the proper season, the part needed is not used, some give their opinion from prejudice and not from experience, and for many other reasons. I for one am in favor of devoting more time to the study of vegetable remedies and less to serum therapy and bacteriology. We have also endeavored to cure by prescribing for names and not for conditions; then not accomplishing what we desire, condemning the drug used, when if administered according to its indications it would have succeeded. We should keep in mind at all times that diseases passing under the same name differ essentially in their general type and character.

The drug I wish to speak about is a vegetable alterative, and one that has been much neglected by the regulars. Alnus rubra, or tag alder, when given in doses of twenty to thirty drops of the tincture, acts as a mild stomachic tonic. It increases the appetite. When given in

doses of twenty drops three or four times a day, it will also act as a good general tonic. It has a direct influence upon the processes of waste and nutrition. John M. Scudder styled it one of his "ideal alteratives." Its most direct action is upon the skin and mucous membranes. It will be found superior to arsenic in clearing the complexion.

We often have ladies who want something to improve their complexion. Remember, tag alder is the drug that will do it. Give it in a case of eczema, where there is feeble vitality, and you will be pleasantly surprised with the results.

In any disease of the skin it will prove of great value. Where the skin is involved in syphilis, do not fail to add alnus to your other indicated drugs.

Scudder says, "Its special use seems to be in those cases in which there is superficial disease of the skin or mucous membranes, taking the form of eczema or pustular eruption." He used it as a general remedy and also as a local application in the above-named conditions.

Let me caution you to make sure you are obtaining a reliable product. This drug is not in general use by all, and every house will not have it up to the standard, no matter what they claim.

B. S. HORNE, M. D.

Bluffton, Ind.

GLONOIN.

Editor Alkaloidal Clinic:—

I have had an experience with glonoin which may be of interest. A. B., farmer's wife, 26, delivered of fifth child March 1. Labor comparatively easy. Three weeks before confinement she had a fall which resulted in pain over the bladder, continuing until a week after confinement. During this time she also complained frequently of gastric disturbances. Commencing on March 14th she

had at intervals of three days paroxysms of dyspnea, accompanied by distressing cough and severe pain over stomach, radiating toward spine, rapid weak heart-beat and temperature 100.2 to 101.5 degrees. Several such attacks were treated by hypodermics of strychnine sulphate, gr. 1-30, and glonoin, gr. 1-100, followed by one granule each of strychnine arsenite and digitalin every fifteen minutes for an hour; also morphine, gr. 1-8, atropine, gr. 1-200, and chloroform, sprinkled on a folded cloth applied to region of pain.

Relief was almost immediate and the distressing symptoms disappeared in an hour. Examination of heart, lungs and genitals after an attack revealed nothing. The relief obtained from the treatment would last about twenty-four hours, when distress would gradually recommence and continue for two or three days, terminating in another attack. In the intervals gastric distress with vomiting of dark blood was noticed. Gave general treatment, mostly tonics and stimulants but all n. g. As the patient was some distance from the office I left a two-ounce bottle of solution of strychnine sulphate, gr. 1-50, digitalin, gr. 1-100 and glonoin, gr. 1-100, to each dram, with instructions to give one-half teaspoonful every half hour if the severe symptoms returned. The husband being alone, got excited, and gave one-half the contents of the bottle in about two hours. Symptoms of poisoning by nitro-glycerin followed, and the next day she had a flushed and puffed face, a constant dull pain over the heart, distressing cough, pulse 116—120 and weak, temperature 99.5.

Examination of the heart now showed typical symptoms of pericarditis with effusion. This effusion was not present or very little before, as the heart had been examined repeatedly. Did the glonoin assist in making the diagnosis and force out the exudate?

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The treatment after this was digitalin, one granule every hour for a week, later every two hours; combined with this strychnine arsenate, Heart-Tonic, caffeine and brandy, were given alternately or combined as needed. She is gradually recovering, but still has cardiac pain upon exertion. There seems to be no valvular lesion. Later, the information was given that she attempted to get up on the 6th, 7th and 9th days after confinement, but returned to bed because of weakness, and also that since her married life of five years she had given birth to and nursed five children, and has assisted on the farm, in such light (?) work as digging stones and harvesting!

J. F. BRENCKLE, M. D.

Kulm, N. D.

—:o:—

What a blessing is an occasional spell of illness to such an overworked drudge!—ED.

SCARLET FEVER.

Dear Doctor:

I am still an alkaloidal enthusiast. I use them continually in my practice, although not exclusively, for I believe in using anything that is good. As a consequence I patronize Wm. S. Merrill Chem. Co. and the Physician's Supply Co., of Kansas City, as well as the A. A. Co. I have been dispensing my own drugs since Feb. 1st, and it is very satisfactory. I hardly ever write an Rx now.

I have had some beautiful results with calcium sulphide and iodide in scarlet fever lately. The iodide controls sore throat to a remarkable degree. In one family I had three cases. Case 1—Child 3 years, worst case I ever saw; alkaloidal treatment only shortened attack; throat kidneys and one ear were affected, throat and kidneys are sound and well but ear is running and an abscess formed be-

neath the periosteal covering of the mastoid, which was opened yesterday and he is doing nicely. As soon as No. 1 showed himself to have scarlet fever I began to saturate the other two children with calcium sulphide; and the result was that No. 2, 2 years old, was broken out very red, but only for a few days and no bad after-effects whatever. Of course she peeled off. No. 3, 1 year old, felt bad for two or three days; a faint blush on forehead, temples and knees and has not peeled off. The parents told me that if they ever wrote a testimonial it would be for those sulphur pills.

Another thing about alkaloids is that they enable a man to compete with the homeopaths, a great item to be considered in a big city. I have a new "homeopathic family" added to my list every once in a while.

This is a new country and some people are used to No. 00 caps or infusions of herbs and roots, so when they kick at the minuteness of my aconitine granules I give them a few tablets of Zomakyne or Dolorpyrine. The W-A Intestinal Antiseptic tablets create a good impression on such people also, on account of their size as well as the good results obtained from their use.

L. T. SMITH, M. D.
Lexington, Okla.

ARTHRITIS DEFORMANS.

Dear Sir:

In reading April CLINIC I came across Query No. 1236, which interested me, principally because I have had several cases similarly afflicted; one recently, wherein static electricity was applied with better results than with any other treatment used by me in preceding cases.

In a recent medical journal a very positive differentiation was made between arthritis deformans and villous arthritis. Accepting those alterations in the cir-

cular cartilage and the extremity of the bones in deformans, and the inflammatory changes in the synovial membrane of the capsule of the joint in the other as correct, this would naturally account for the benefit derived from treatment by static electricity in the latter, and not only its frequent failure but that of most all approved medication in the other.

Examination of the urine by Schuller, in a series of his cases of arthritis deformans, disclosed a lessened excretion of lime salts and earthy phosphates. He states that the normal amount is from three to six grains daily, while in arthritis deformans it was only one-fourth to one and one-fourth grains; showing derangement in metabolism, and a retention or deposit of the lime salts in increased amount in the joints and cartilage.

From the history of the doctor's case one would suspect it to be of the villous class; for arthritis deformans usually is without much pain or tenderness, the functional use of the affected parts is interfered with much less and much later in deformans, and not rarely involved only a single joint. Therefore, we would expect amelioration of the symptoms, if not a cure, by proper application of static electricity to his patient.

EDWARD J. NICKERSON, M. D.
Chicago, Ill.

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We have repeatedly urged our readers not to neglect static electricity or confound it with faradism and galvanism.—ED.

SMALLPOX AND CALCIUM SULPHIDE.

My Dear Doctor:

I have seen several articles in regard to my use of calcium sulphide in two cases of smallpox I treated last spring. All credit should be given the ALKA-

LOIDAL CLINIC (from whose pages we get all good things), for I had just read your article on smallpox in the April CLINIC (1899) when I was called to treat these cases. I began immediately to give each of them eight grains of calcium sulphide every twenty-four hours, big doses, yes, but do not be afraid to use that much of Abbott's preparation—unless you want to make trouble for your patient do not use some cheap article.

When Dr. Hurty came down and I told him my plan of treatment he said he had never heard of the use of calcium sulphide for smallpox. I showed him your article and he said he would advise the use of calcium sulphide in other cases and watch results. I have never read of any other cases being treated with it, but from results obtained from these two I would advise the use of calcium sulphide in all cases of smallpox.

In reply to Query 1255: If the doctor will follow your instruction in regard to diet and use the atropine-glonoin granule as recommended, I think he will be highly pleased with the results. At least in three cases in which I have used them they have given better satisfaction than any other treatment.

I have read every issue of the CLINIC, have used alkaloidal granules since 1890, and could not be induced to go back to using tinctures and extracts.

JAMES H. GREEN, M. D.
No. Vernon, Ind.

SMALLPOX.

I am about through with a two-months' siege of smallpox in this locality. This same smallpox, by some clinicians and diagnosticians in this state, has been called "Cuban chickenpox," elephant's itch," etc. If there is anything "elephantic" (new term) about it, it was in the

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manner in which it irritated the hide of its victims.

I see that a member of the State Medical Society which convened at Topeka last week declared that vaccination was "*nil*" again this same smallpox. He spoke from his own standpoint, no doubt, but as his observation extends not backward to any previous experience his declaration should not be regarded as authoritative. I therefore beg leave to differ with him upon the subject of vaccination in this epidemic, for my observation teaches me that vaccination is as successful in preventing and modifying this smallpox as it was in any previous epidemic of the disease with which I have had to contend. Charging the system well with calcium sulphide tends to hasten maturation and desquamation, and therefore shortens the disease. This is agreeable to my observation. Of the fifty-two cases developed in this locality but six were confluent. In a number of cases the patients passed through the variolous fever stages with but one or two papules appearing.

I am fully convinced that alkaloidal medication possesses and affords many advantages to both patient and physician. I therefore desire a continuance of the CLINIC, in order that I may be enabled to keep abreast of the progress being made in this departure from shotgun methods, which have never very materially benefited anybody but the druggist and the undertaker. But for the sake of common sense, which seems really to be an uncommon thing, keep the CLINIC free from fads. Insist occasionally that the code of medical ethics be partially observed. If it cannot be observed closely, insist that it be talked about at least once in a great while among the brethren. It might not do much good in Kansas, but it might do some good elsewhere.

Here is your dollar, which is little enough, but as that is your price I will offer you no more, and so send on the CLINIC.

N. D. TOBY, M. D.
Salina, Kans.

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We trust each reader will report if he has tried the sulphides in smallpox. It is the most important topic before us.—ED.

CAN PNEUMONIA BE ABORTED?

I have been using Defervescent compound and Dosimetric trinity granules in a number of cases of pneumonia during the past winter and spring, and have come to the following conclusions:

First: That pneumonia can frequently be aborted during the first or congestive stage before consolidation has taken place.

Second: Those cases in which consolidation has taken place before beginning treatment cannot be aborted. In some, the temperature and pulse are reduced slightly and in others they are not materially affected, that is, they remain the same or even increase somewhat until the 7th or 9th day, when the fever falls by crisis and the patient is convalescent, just the same as under any or no particular treatment.

Perhaps the following case will explain better. Mamie G., age 4 years, Monday, 7th, taken with vomiting, high fever, delirium, and slight hacking cough. Tuesday, 8th, I was called in the evening and found temp. 104.5, pulse 140—150, resp. 40, left lung entirely consolidated, also apex of right lung, slight hacking cough and very acute delirium.

The patient went on with very little variation in temperature and pulse until the 13th, when I found pulse about 100, temp. 99.5. This was probably the sev-

enth day and crisis had occurred, the lungs were resolving. The next day, the 14th, the temperature was normal and has remained so; she is practically well.

Treatment: For the first two or three days I dissolved fourteen granules of Defervescent compound in forty-eight teaspoonfuls of water and gave a teaspoonful every fifteen minutes for ten doses, then every half hour night and day. Then I prepared a combination of Defervescent compound and Dosimetric trinity, seven each, in the forty-eight teaspoonfuls of water and continued this every half hour. Now, did this treatment do any good or did the patient get well in spite of it? How can we tell when we are giving too much of these remedies in cases like the preceding, if we cannot reduce the temperature or pulse, and the patient is too young to complain of tingling or numbness of lips or fingers?

Why is it that in some patients the temperature and pulse drop considerably in or about the fifth day and then rise and go on as before, the alkaloidal treatment being given constantly? If this be due to extension of the inflammation to other parts of the lungs, why is it that it was not checked in the congestive stage?

What is to be done when the pulse falls to 80 and the temperature continues at 102 and 103?

I find some children while taking strychnine arsenate do not pass their water as frequently as they should, some of them going twenty-four hours. Why is this? Is it suppression or retention?

G. M., M. D.

—, New Jersey.

—:o:—

Usually these recrudescences are due to neglect of the bowels and consequent autotoxemia. When the pulse falls and the fever stays, empty and disinfect the bowels, drop digitalin and give veratrine alone. If the use of strychnine is fol-

lowed by oliguria arterial tensors are contraindicated. Do not be afraid of veratrine.—ED.

DYSENTERY.

The alkaloids came safely and just in the right time. My baby boy, 18 months old, had been suffering several days with dysentery from dentition. Being out of the alkaloids I was using the specific tinctures, which I always keep on hand and give the second place of importance if I happen to be out of alkaloids. As soon as the alkaloids came I changed and gave aconitine, hyoscyamine, emetin, codeine with Intestinal Antiseptic, flushing with warm boric acid solution. I am glad to say the little fellow is very much improved, tenesmus entirely relieved and stools have a more natural look and have lost the horrible putrescent odor they had. The alkaloids are of inestimable value, particularly here in Mexico where it is so difficult to obtain reliable preparations.

I have had an experience of over thirty-five years in the practice of medicine and am not a "pathist." I simply try to use common sense. The alkaloids give me quicker effects and better results than any other class of medicines.

With every good wish for the long life of the CLINIC and its able editors.

CHAS. H. PORTER, M. D.
Ures, Sonora, Mexico.

OBJECTIONS.

Editor Alkaloidal Clinic :—I have been a subscriber and reader of the CLINIC for about two years and am pleased to receive it. It always gives me new ideas; each issue has a few splendid articles that are alone worth the price paid.

I think its greatest drawback is due to some of its contributors who rush into

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print with their cure-alls, before they have proven them even to their own satisfaction. They have good results from their first test, and then they come as if they knew the same result would come to them in the next case, but not so. There are few physicians who have been in the practice as long as five years, but that at one time thought they had discovered a specific, but Brother, remember there are few specifics. Even quinine sometimes fails in malaria. However, we are all anxious, we are longing for something better, we are progressive, and I hope that Alkalometry will succeed. And from a theoretical point we are compelled to admit the possibility.

I say I hope it will succeed. Why? Because nothing else has, because we could reduce medicine to a more scientific basis, because the alkaloids are perhaps the most of them devoid of irritable and nauseating properties, they are easily administered, etc. In fact, there are many reasons why, but alas! I have been studying this system for two years, and I have never yet been able to get the gratifying results reported in each CLINIC. I have bought several dollars' worth of the granules from the Abbott Alkaloidal Co., and have used them when and where my judgment prompted me, both in hospital and private practice. In hospital, where I have trained nurses, I have not been able to get gratifying results, except in one case out of fifty or sixty trials. In private practice (and altogether with children) I have had as I thought some good results, but no better than from other medicines. If I could do what many of your scribes claim to do with these granules, I could soon retire to private life, but I can't.

There are two questions for me to solve, to wit: There are a great many physicians who are misled, or make false reports, or else I am so stupid that I can't

catch on. I will, in a friendly spirit, venture to say that there are a great many reports published in the CLINIC that are not as full and truthful as they might be. In the treatment of these diseases they rarely mention the fact that they also used acetanilid, digitalis, quinine, etc., but give the granules all credit.

Doctors, this is wrong, if you do it; such articles do not advance medicine. Nothing but the truth will ever help us. Let me kindly refer to a few.

Dr. A. W. Barton makes the impression that nitroglycerin will control post-partum hemorrhage. I want to ask you if you believe it; or would you rely upon such a course of treatment? I know Dr. B. would not, for I am personally acquainted with him. He is a splendid physician and a truthful man, and I am sure he unintentionally left out a part of his treatment. Did he not remove the contents from the uterus? This in itself will often control post-partum hemorrhage, and would it not have been better than nitroglycerin?

Now please let me refer to an article upon typhoid fever. I think it can be found in 1897 CLINIC. I don't remember its author, but he makes the assertion that he can abort said fever every time (I believe he said) with Nuclein and copper arsenite. Soon after reading this article I had an occasion to try the treatment. After first giving her a course of calomel and quinine, and before I made my diagnosis, I put her on this cure-all treatment. At this time her temperature was not very high, say 102. Well, I kept her on it for 37 days, with the addition of strychnine, when indicated, tho' it never ran high at any time, and she recovered, and I succeeded in "aborting" the fever after 37 days.

Another case comes, first gave calomel, and quinine, as we all do in this country, because it cleans the alimentary tract,

does away with malaria, and helps to make the diagnosis. Now I put her on nuclein and copper arsenite, as advised by this doctor, and kept it up for 25 days, using water to control temperature. She was sick 42 days, and I was compelled to drop back on zinc, salol, calomel and nux vomica, whisky, strychnine, etc., and "aborted" the fever on the 42d day.

Well, I have used the treatment since, many times. I remember I used it in hospital in two cases, with similar results, and am ready to say that there is not a thing in the treatment aborting typhoid fever. I use a great deal of copper arsenite in bowel troubles, but as to the nuclein, I absolutely believe that that much parched flour would do more good. I have used it in many wasting diseases, have a man in the hospital to-day with tuberculosis, and have given it to him continuously for 70 days, and I can't see that it does him any good.

May CLINIC, 1899, p. 323, Dr. J. E. Smith lets some neighbor's child make his diagnosis and he accepts it, and then saturates his patient with calcium sulphide from one day to the next morning. Is it possible to do it so quickly? He makes it appear that this drug did the work. I do not believe he had a case of membranous croup, for he says he could not keep him in bed, that he wanted to play all the time. I have seen a few cases of membranous croup, and they were not in a playful spirit either. They all died. I was called in consultation in each case. I used calcium sulphide in the last case, but it died. I am armed with a bottle of dark iodized calcium, ready for the next one.

On the same page Dr. Ripley has a splendid article on pneumonia, and it is worth one year's subscription to the CLINIC, but I can't see where he aborted pneumonia. Doctor, is it not common for pneumonia to run its course in five

days? If not, I have aborted several cases. I don't mean that they get out in five days, but have you not discharged many cases by the fifth day? I remember several years ago Mr. Ford was in town one cold rainy day, and consulted me concerning his bad feelings, went home, six hours later I saw him after a hard chill, temperature 105, left lung congested, rapid breathing, great pain in chest, etc. I gave him ten grains of calomel, followed by salts, results good; Antikamnia and codeine for fever and pain, also mustard plaster; next days' treatment about the same, expectorating very freely, brick-dust sputum; third day, temperature normal, resolution began; then put him on tonic and discharged him.

And I want to say that there is nothing better to relieve these cases than Antikamnia and codeine; in fact, all the coal-tar derivatives act well in many cases, and they do not, as supposed by many, depress the heart-action. After they have been given for several days, or in overdoses, they act upon the oxygen-carrying properties of the blood, but do not act directly upon the heart. I discharged a case of pneumonia to-day that has been sick only five days; treatment, calomel, zinc and sodium sulphocarbonates, apomorphine, veratrum viride fl. ext., carbonate ammonia, syr. tolu, and strychnine nitrate; camphorated oil as a local application on a cotton jacket. I also gave him a few doses of Antikamnia to reduce fever. Therefore I don't see any room for Dr. Ripley's criticism; however, he did well with his case.

Same issue, page 324, Dr. A. B. Ramsey reports his first case aborted. Doctor, why did you not wait longer and further test your treatment?

There are hundreds of cases reported in the CLINIC I would like to discuss and kindly criticise. I hope every contribu-

tor will report the whole truth. If you use any other treatment than Alkalometry let's have it combined, just as it was, and don't report your first and only case; also tell us some of your failures, for I know you have them, just as I do.

Elimination is the keynote to the successful termination of a majority of all diseases, and there are many drugs that will assist nature in this function. We must remember that proper hygiene, suitable nourishment, pleasant surroundings and rest or exercise, contribute materially.

I also see Dr. —, giving his experience with Merck's aconitine, which was a complete failure, then he sends to the Abbott Alkaloidal Co. and gets a supply, and he is crowned with the best of success. Now, isn't it a fact that Abbott carries no other except Merck's, the very same he was first using? Was it not the doctor's failure and not the aconitine? Please answer. Light is what I want. I expect to continue the use of the alkaloids, for I believe the principle is good, and success will come.

E. E. GUINN, M. D.

Rusk, Tex.

—:o:—

You are partly right and partly wrong. You have followed the letter too closely and not the spirit. Had you read the CLINIC closely you would have seen that very few followed Aulde in his recommendation of nuclein and copper arsenite for typhoid fever. Instead of that nearly everyone follows Dr. Waugh in flushing the bowels with calomel and saline or by enemas and then keeping them disinfected with the sulphocarbonate of zinc.

When Dr. Barton gave nitro-glycerin, he gave it not to control post-partum hemorrhage but to bring the blood to the brain and stop fainting. Atropine is the remedy in these cases to bring the blood

to the skin and keep it there out of danger.

In regard to calcium sulphide in croup, I have tried with all my strength to make it clear that calcium sulphide is a remedy for diphtheria, calcium iodide for croup, and that neither helps the other disease.

As to aborting pneumonia in five days: That as an average is one-half the time Osler requires, which is certainly not bad. Many cases of uncertain pneumonia are aborted in 24 to 48 hours, but these are not usually included in reports, as the diagnosis is somewhat uncertain on account of expeditious recovery. I very much wish doctors would submit all such cases to the laboratory for diagnosis. When you are using sulphocarbonate of zinc in pneumonia you are strictly following Dr. Waugh's suggestions, as he always urges its use in addition to the alkaloids.

While many cases are reported after the first experience and before it is confirmed, you must recollect our friends are not writing for record, but hasten to give their brethren the benefit of their experience as soon as it occurs, sometimes even making the suggestion before they have tried it. You must give due value to such suggestions, as they are simply given by the writers for what they may be worth.

As to Merck's aconitine: You missed the point of that article altogether. The Abbott Alkaloidal Co. uses Merck's amorphous aconitine and no other. Other people say they do, and that they put the full amount called for in each granule, and some of them undoubtedly do; but there are grades of excellence in the manufacture of goods, and perhaps some do not hit it as well as others.

I shall be glad to hear from you again in the same line, and to consider any suggestions you may make of the same order.—ED.

A CONTRAST: LLOYD AND BLOYER.

For the man who honestly differs with us we have esteem and respect; for the rabid partisan we have neither. Take the article by Prof. Lloyd in the *Eclectic Medical Journal*, entitled "*The Chemical Study of Plant Drugs*," and note how the believer in a theory of drug-action differing from the alkaloidal states his case, clearly, dispassionately, with an evident desire to first get at the truth of the matter, to defend his own theory afterwards. In this he follows the example of Darwin, who taught the world as no one else had done the difference between seeking to establish the truth and to establish a theory.

Prof. Lloyd says:

"I have met with many disappointments in theory and many curious experiences of fact, but, as a general result, I am strengthened in my opinion to the effect that medicinal agents are not always what we expect, and are seldom, if ever, ready created in nature as man desires to use them. True it is that the crude herbs carry medicinal qualities, but they also carry other materials besides remedial agents, some of these innocuous, but burdensome; some of them harmless in themselves, but susceptible of alterations that subsequently prove injurious to the remedial constituents; some of them antagonistic to the uses the physician wishes to make of the part of the drug that he finds curative.

"Thus, in many cathartic drugs, we find antagonistic astringents, which, however, if present in certain proportions, are useful as modifiers; in many plants we find mixtures of oils that are unlike; in other cases we find associated alkaloids which are very different in action, and in all we find much gum, sugar, starch, chlorophyll, woody matter, etc., which are of no value and may even prove injurious.

"The idea that now dominates many pharmacists is that of abstracting one dominant principle from the plant, and using that constituent. To this, as is well known, I object, believing that one constituent of a drug is seldom, if ever, the same as the drug, if its useful constituents be balanced properly in a liquid preparation. Another scheme which is the base of the principle of making extracts, is to abstract from a drug all the constituents a given menstruum will take out of it; to which scheme, on account of its crudeness, I also object, although it is better, perhaps, than that of disorganizing the drug completely by chemical means.

"But, my friends, while we can thus reason concerning the general facts in the case, it is not so easy to overcome the perplexing problems that confront us when we step into nature's field. It is shown by my own experience that a lifetime may be worn out to little effect in this search into nature's secrets, and I freely admit that after continuous thought and experimentation, many problems concerning eclectic medicines that have perplexed me since the work began, and have since been persistently prosecuted, are as much problems to-day as when I commenced to work in this field.

"The question arises, what does this study of drugs demand of him who enters the field? I would say, the liberation of thought, the uplifting of mind, the casting aside of prejudices, the attempt to escape from ruts that enslave the ideas, and in being prepared to discover that much which one believes, without a question, may be based on false views and erroneous conditions. In other words, the study of fact, as facts appear, may be a study of reflections and not of objects. The student in this field must be ever ready to relinquish the error of previous authority, even though that authority be one's own self.

"To go a step further, my experience has been that a drug constituent may be useful in one place and harmful in another, and yet it may require a lifetime of experimentation and the expenditure of a small fortune to determine just where it is useful and where it is objectionable. I also learned that a proximate constituent may be physiologically active, and even be the conspicuous physiological constituent of a drug, and yet, for a particular use to which physicians desire to put a preparation of the drug, may be actually harmful. The dominating constituent may cover and mask others, which, were it lessened in amount, or abstracted entirely, would leave a remedy invaluable for affections that never can be reached while that overtopping objectionable constituent is present.

"For this reason, while assay processes can determine the question as to whether an official pharmaceutical preparation is a fair representative of a drug as concerns some one poisonous or chemically active constituent, such a process will not determine the value of an unofficial preparation in therapy, where it is perhaps desirable not only to lessen the proportion of an agent, but even eliminate it altogether. Thus, the assay of official podophyllum fluid extract should yield a certain amount of resin of podophyllum, which is the active cathartic principle of that drug, but for the alterative value of the drug, as exemplified by the late Prof. Scudder thirty years ago, the resin is not only useless but objectionable. This example could be enlarged upon, but it illustrates how it is that a study of drugs in connection with particular symptoms may render it not only desirable to balance certain natural constituents, but may even show that when the dominant poison or chemically active principle is removed, the remaining principles possess a specific value that can never be determined by ad-

ministering the crude percolate or tincture.

"A single example, well known to all of my eclectic readers, will suffice to point to this fact. It took me fifteen years to perceive that the colored constituents of hydrastis were worse than useless in the treatment of certain cases in which Dr. King wished to use hydrastis. It required many years to discover just which of the several constituents of the drug he desired to have associated together, and which excluded, and how best to do this. The study of the nature and the proportion of these constituents best fitted to accomplish his object, was in itself a problem, and its presentation produced finally an unofficial preparation that is empirical to the highest degree, in that the struggle towards its final composition began over twenty years ago, and has been carried on step by step experimentally ever since. To this it may be added, that the valuable constituents of hydrastis preparations used for other purposes by the physician are either excluded altogether or nearly so from this one, and that the final product bears no mathematical relationship to the associated constituents of the natural drug, nor should they in the direction Prof. King desired to use it. Take this drug as an example. Not only does nature never make any two lots of this root identical, but the conspicuous constituents that are valued for one class of diseases are harmful where Prof. King wished to use the drug, and the preparation, to do its best work, must be correctly balanced, both as to the presence of desirable constituents and such others as modify or disturb them.

"This study of galenical drugs, I say again, as I wrote twenty-five years ago, and venture to repeat, is a mighty work. No man who runs a pharmacal hobby can long hold that hobby and work it conscientiously, unless that hobby be the

thought that man is very small, and the field about infinitely great."

All the respect due to the Eclecticism of to-day is attributable to a group of honest men like Prof. Lloyd, not to the noisy polemics who thrive on rancor-exciting, like Bloyer of the *Gleaner*, who, perfectly regardless of facts, writes thus:

"The alkaloidal faddists make many curious arguments upon many occasions. Back of all of them is the sale of German alkaloids, put up in pellets according to the metric system, and no means are neglected that may advance German interests. The most reckless assertions are made in the attempt to decry American manufacturers and uphold foreigners. These people even go so far as to say that our American manufacturers buy their chemicals from Germany, and in their struggles to thrust themselves forward, and to serve their cause, assert that a single German alkaloid is a representative of the complex drug that yields it, and that in order to get the alkaloid pure you must go to Germany for it. They do not hesitate to call such firms as Rosengarten & Sons, Mallinckrodt & Co., Powers & Weightman, by name, and assert that their products are not reliable and pure. We maintain that the firms that have made American chemicals the equal of any in the world should not be abused without protest, and we challenge the promoters of the alkaloidal fad to produce more upright business men than are these men, who, since 1826, have honored American business and served American physicians. The names of these firms and men are honored this country over, and it ill behooves any man to attempt to create capital for foreigners by striking them down. Since the alkaloidal medication is created for the benefit of the excruciatingly regular, of course, we, as eclectics, look for a few jabs, but we can turn their faces to the wall with benefit

to our patients and no loss to ourselves. With specific medicines and specific medication (no matter if they do borrow some of our remedies and ideas, we can give them cards and spades and still beat them, hands down.)"

We have no comment.

W. F. WAUGH, M. D.

Chicago, Ill.

CREDE'S METHOD.

I see an article condemning the Crede method for the expulsion of the placenta. I do not agree with Dr. Brodnax. I have seen three women, at least, die with septicemia, inexperienced young doctors having left portions of the placenta or membranes in the womb. By Crede's method it is not necessary to produce pressure with the thumb and fingers on the ovaries; the child, in the first place, should not be cut away or the cord excised for ten or twenty minutes if hemorrhage does not take place.

If hemorrhage does occur, of course the placenta must be removed at once. With firm traction on the cord downward, pushing against the fundus firmly and steadily with the palm, when the placenta has come into the vagina, still holding onto the cord with one hand, pull out all the membranes with steady traction until all is removed.

No matter if a doctor has met with a case of postpartum hemorrhage or not, when he does, he will wish to be prepared with heavy artillery and a good gunner. He must have a fountain syringe with plenty of hot water, so as to run the tube into the uterus, and the water must be hot; cold water poured over the uterus will help, or ice. One young woman whom I have attended in two confinements is a flooder. I find a hypodermic of morphine and ergotin very good, gr. 1-8 is sufficient, but plenty of hot water is the remedy. Some advocate vinegar.

I never leave a woman when she is gaping or yawning.

I left a case once one hour after confinement. I started to drive home. After going half a mile I looked round and saw a man upon a grain-house waving his hat. I drove back on the run, went into the house, found the blood running off the bed onto the floor, woman fainting. I had a hard time to save her life. The birth was normal.

No, it would be a bungling job to injure the ovaries, Doctor, by Crede's method, but your caution deserves merit and consideration nevertheless.

J. C. DWYER, M. D.

Valentine, Neb.

DYSENTERY.

I note the article on page 381, May CLINIC, in regard to dysentery, and send my experience in the treatment of that disease.

For infants and children I use mercury bichloride, x, and even higher attenuation—with the best of results—almost a specific for children.

For adults I use equal parts of rosemary oil, castor oil and laudanum, a tea-spoonful every six hours. One dose cures nine times out of ten, and relieves the griping and tenesmus peculiar to that disease. You are at liberty to publish my experience of over fifty years if you wish.

H. A. GOODALE, M. D.
East Tawas, Mich.

TRAUMATISM.

A young man, 23 years of age, two years ago fell about twenty feet, from the top of a factory, lit across a 4x6 joist, broke it in two, went to work in two days. Six weeks ago he fell on his right hip but worked the rest of the day. In three or four days he was taken with a severe pain in the abdomen, which lasted

more or less until death. His abdomen was swollen and tender, bowels would not respond to enemas, no fever, pulse normal until twenty-four hours before death, then ran to 118. He passed some bloody urine, left leg was swollen. After he died I cut into the abdomen and about one-half gallon of fluid ran out, looked like urine, but he had been passing plenty. The small intestines were distended to twice their normal size, the contents of the bowels were soft, almost fluid, the appendix was adherent to the psoas muscle but not inflamed, there was what I took to be pus in the abdomen, most of it around the mesentery, but I could not find where it came from, left kidney three times its normal size, the omentum sloughing and very dark, gall-bladder full of dark thick substance and the duct closed. If you have room I would like to see the diagnosis in the CLINIC. I have had some very gratifying results from the W-A Vaginal Antiseptics.

A. Z. GADBURY, M. D.
Upland, Ind.

—:o:—
An abscess formed that broke into the peritoneum.—ED.

ALKALOIDS.

Brother A. said recently in answer to an order for his alkaloids, "I hope you find them reliable." I do, and I feel under obligations to the CLINIC family for the many good things said in its pages. I will say a few things that I hope may be of benefit to some young brother.

First, use the alkaloids; you won't have time at this age to use the decoctions, tinctures and extracts, you would be left, and I have found Abbott's most reliable. The best thing that I remember now to have been said in the CLINIC in the last twelve months, and I have forgotten who said it, but you can find it or the CLINIC

editor will help you out, and be he young or old, class him hereafter with our editors—Brothers Epstein, Brodnax (though he is a little cranky on quinine), Brewer, Aulde, Shaller, and others, "If you want to be a good doctor don't use opium or any of its alkaloids." Glonoin, hyoscamine, cicutine, atropine and the antisepsitics will help you out.

The next best thing that was ever said in any journal is "clean out and clean up." "Eliminate." Use Saline Laxative and support the asthenic with strychnine, iron and quinine arsenates.

CONRAD E. COOK, M. D.
New Iberia, La.

WHAT WAS IT?

Mrs. W. came to my office in June, '97, and called my attention to an enlargement in the left iliac region, extending the full length of the fallopian tube.

The following history was given me: Some six months before she stopped menstruating and shortly after this the tumor began to grow. In about four weeks she menstruated again, but the enlargement increased and the next month stopped again and she said she felt as if she were pregnant and seemed to feel quickening motions, but it was on her side where the tumor was located, had morning sickness but stopped after third month, every three to four weeks she menstruated but was nearly a total wreck physically. Ten months after I saw her she became pregnant but her side gave her continual trouble; delivered at full term of a healthy male child who at present is an unusually stout boy.

Three months after confinement she began to discharge from her uterus an offensive purulent fluid just before her monthly sickness, sometimes a pint, again a very small quantity. This continued until May, 1900, when she had a very

severe hemorrhage from the uterus, easily controlled. Then a discharge commenced, the consistency of soft soap, with small portions of fleshy lumps much like portions of placenta. The discharge was very offensive, indeed.

May 4th I was again called on account of a very severe hemorrhage, in fact I found the patient in a faint when I arrived; stopped hemorrhage, which was very bright blood, without any bad odor from pus or material. Called again 9 p. m. in haste, the party telling me the patient was dying. I found her in a faint, lasting ten minutes. Fainting fits continued till 2 a. m., when I left her comparatively easy and asleep. She continued to improve slowly till the 7th, when she passed a mole about 2 1-2 inches by 3 1-2, showing a stuffing at the attached extremity looking very much like a placenta. On cutting it open I found it cup-shaped and hollow. The tumor in the side was gone and very little soreness remained, but there has passed since a small amount of pus. The patient is recovering very rapidly, I am glad to say.

Perhaps my treatment might be of help to some brother in the future. One granule each of strychnine arsenate and nuclein, every half hour till the fainting ceased, with digitalin to support heart-action (as it proved best in this case); afterwards continued the strychnine every three hours with Protonuclein every four hours, as I was well supplied with it and not with Aulde's Nuclein solution. On the 10th her stomach and liver began troubling her. I gave calomel in tenths for four days, then placed her on the following: Rhubarb 4 gr., cascara 30 gr., wahoo 3 gr., blue flag 2 gr., sodium salicylate 2 gr., sodium phosphate 5 gr., with aromatics; in fact, it is Nelson Baker's Cascara carminative with rhubarb added. When she had fever she was placed on Defervescent compound

till temperature became normal. For her extreme nervousness she was placed on Celery Kola Coca Comp. Elix., in dram doses, as needed; used W-A Vaginal Antiseptic as wash, and Anazyme uterine tablets every other night. Used some brandy when vitality was very low. Am convinced your tablets and granules are the best.

G. W. WHITELEY, M. D.
Albany, Mo.

—:o:—

A tubal pregnancy cured by Nature.—ED.

DEFOE'S PLAGUE.

Editor Clinic:

In your editorial on "Spring Cleaning," I notice you recommend Defoe's "History of the Great Plague of London" for reading. While it is good reading it is not authentic, as you probably know, being entirely fictitious throughout. Consult Prof. Cross's work on the "Development of the English Novel," published by MacMillan & Co., 1899, p. 29.

L. T. DAY, M. D.

Westport, Conn.

—:o:—

That is the most remarkable thing about the book. Defoe was not a doctor, nor did he witness the scenes he so graphically described, though he may have conversed with eyewitnesses. Nevertheless he has given us the best description of a plague-visitation extant, and has given the data as to fatality at different periods, etc., correctly.—ED.

COMMENTS.

In your reply to Query 1309 you advise the use of galvanism, wetting the negative electrode with saturated solution of potassium iodide. You say that the current breaks up the compound and

carries iodine into the tissues. This is interesting and I would like to know the results of your experience with this method. Back in 1865 my friend, Dr. Wm. Brittingham, had some glass tubes made with a cork at the last end. This tube and its contents (he went through with 20 odd drugs) was made portion of a circuit of an alternating current, the wires protruding one-fourth inch or thereabouts from the ends of the corks and into the solution. He secured all the effects of aconite, gelsemium, belladonna, colchicum, etc., but gave it up, as there was no way of accurately gauging the dose, as a consequence of which he had difficulty in resuscitating a patient who received an overdose of aconite.

Prof. Woodbury (page 351) says, "We must look, therefore, to the nucleus as the seat of functional activity of the cell,—indeed of the entire organism." Prof. Beale says that probably four-fifths of the body is in the "former or not living state." This he terms "protoplasm." He draws attention to the great distinction between "living" and "formed" matter of the alimentary part of the cell, and has shown that "living" matter which he terms "bioplasm" (Greek bios, life, and plasm, form) corresponds to the material of which the ameba, white corpuscle, etc., are composed. It has the capacity to transform the inert into active matter—to stimulate protoplasmic activity. The bioplasts are colored red by an ammoniacal solution of carmine, while the formed material (protoplasm) remains colorless. I would like to ask Dr. Woodbury if he has ever investigated this subject, and if not, why not? Beale was one of the greatest microscopists that ever lived, and certainly worthy of some study.

I begin to believe what Dr. Abbott has often said in regard to the journals being ten years ahead of the text-books, only he should have said forty years. Dr.

Waiss, a professor of gynecology, says (page 366), "In all the text-books I had access to, the only treatment for rigid os uteri, when interference becomes necessary, is invariably the knife." Wake up, Doctor! For forty years rigid os has been treated with extract of belladonna locally, and several other remedies are equally efficacious. A favorite prescription for eight years has been cocaine hydrochlorate, five per cent solution, 1 oz., atropine gr. 1. M. Direct: Apply a dram on a tampon to the os, and leave it five or ten minutes. I never heard of "small cuts around the periphery," and never needed 'em. Now comes Dr. Waiss and discovers (?) that cocaine will relax rigid os. The application is equally as valuable in rectal or any other examination. Try it.

EDWIN F. BOWERS, M. D.
New York City.

DR. BELCHER'S REMEDY.

Gentlemen:

In the CLINIC for April, Dr. C. E. Belcher, under the head of "Natural and Mechanical Absorption," after mentioning the great discovery of Crotte, of producing absorption by conveying formaldehyde through the tissues of the body to the spot infected with bacilli, by electrical force, and of other discoveries by Pasteur, Koch, Sequest and Hammond, speaks of a discovery made by himself, as a result of his reflections upon the subject of absorption, suggested by Crotte's discovery. He claims to have made or discovered a *positive, protective emollient germicide*, composed of petrolatum, phenol, turpentine, white oil of thyme, eucalyptus and gaultheria, cleansed by borate of soda.

Now, if the doctor wrote the article for the information of the profession, he has failed to accomplish his object, by not

telling in what proportions the ingredients named should be used. It is not presumable that these substances, mixed without regard to definite proportions, will have the effect that the doctor claims for his preparation.

It is of the utmost importance for everyone who makes a valuable discovery of this kind that they should minutely describe every manipulation, and the exact proportions of each ingredient entering into the combination. Otherwise their communications are of little or no value to the profession. It is to be hoped that Dr. Belcher will send in his formula exact in every particular. Then the profession may at once begin the use of it, without trying to discover its proportions by experiment.

He expresses the hope that his article will "stimulate others to advanced thought and ideas, as the investigations of Crotte had stimulated him to inquire more and go deeper." His article, no doubt, will have that effect, but to make progress we must know what is already done and how it is done.

I am anxious to see Dr. Belcher's formula, as from some observations I have made, there is considerable merit in it.

H. C. ALLEN, M. D.
Mountain House, Ark.

—:o:—

Cannot any one put these drugs together to suit his case? No special virtue resides in a special formula, nor is it so claimed. Try ten minims each, of the aromatic agents, 30 grains of borax and an ounce of neutral petrolatum.—ED.

REPLY TO DR. DE ARMAND.

Editor Alkaloidal Clinic:

In the May CLINIC appears a criticism on my article on typhoid fever, from the pen of Dr. De Armand. Did his deductions have the merit of common sense

THE ALKALOIDAL CLINIC.

they might be instructive. First he denies the possibility of diagnosing typhoid fever, and then gives us a dogmatic dissertation on its etiology, emphasizing the fact that it is a "labor to nurse as well as to doctor," whatever that may mean. Then he gives us a "plan" of treatment, and then tells us there is no treatment, only "let it alone" and nature will cure it; or in his words, "we have very little part in the curing of typhoid fever patients."

He just roasts to a finish the \$15 cheap jack doctor, "who has *amazed* the community into adopting a \$15 doctor." Do you "catch on" to that gem of modern literature? Then he lets up on me for a minute, and proceeds to instil into our thickened cranium the great fact that symptoms cut no ice in this case, unless we get the bug in his war paint we are not in it. D'ye mind that, now! No bug in war paint, no disease. In the next breath he tells us bugs without physical symptoms don't count, and don't get out the score cards until all the back counties are heard from; then with great pomp he announces the fact that the poor doctor who uses the microscope is as big a fool as the man who pulls in a fire alarm when he sees smoke issuing from a neighbor's chimney. Good gracious, what logic!

Now the poor fellow has another one, and jumps onto me with both feet and excoriates me to a last finish this time. Lordy! I am perfectly pulverized, annihilated, done for. My case a trivial one, treatment a trivial one, doctor ditto. Well, did you ever!!!

A doctor, to be a success, must be a careful observer, a deep student of clinical observations. How frequently we meet a doctor who will write a prescription of ten or fifteen drugs, hand it to the patient and retire, without having the faintest idea of what the effect of those drugs is to be on the patient.

Above all things let me say again, doctors must be keen observers. Unless they know what the physiologic as well as the therapeutic effect of each drug is, on different characters and different temperaments, they are not good doctors.

A word as to dollars and cents. Now, I don't know if Dr. De Armand practises purely for glory, or for a love of humanity, but I will positively state that I am a doctor for what is honorably in it, and if I can cure a patient for \$15 I am not going to charge him \$225. I will make the positive statement that I have found the alkaloidal granules to be arms of precision, to be more accurate, the effect more certain, and everything more satisfactory all around, than the old way of treating disease. I don't think much of a doctor who has been in practice for fifteen or twenty years, who is unable to diagnose typhoid fever, or diphtheria, or pneumonia, in very short order; and I think less of those who will refuse to use the remedies that will abort these diseases in short order, whether it be \$15 or \$1.00 in their copious pockets. Inviting higher criticism.

JAMES O'READY, M. D.
Milbank, S. D.

LOVE VERSUS SCIENCE.

Sam Harris was a westerner, just over
six feet two,
A big and manly fellow with honest eyes
of blue.
He had passed through many dangers
and came out safe and sound,
Till Cupid let an arrow fly that brought
him to the ground.

Miss Theodosia Winthrop was a Vassar
graduate,
With a thirst for information that was
quite insatiate.
She spoke all modern languages, and that
of ancient Greece,

And occasionally English of the purest Bostonese.

She knew all human history, and how the story ran,
From the reign of Bill McKinley back to prehistoric man;
And even further back, to times, contemporaneous
With the longimanous gibbons and the anthropophagus.

She owned a lovely microscope and entertained her friends
With the curious revelations of its achromatic lens;
For the "ology" she loved the best was physiology,
And the dearest book of all her books was Gray's Anatomy.

Now for ordinary maidens we are all agreed I hope
That a six-foot man is better than a Reichert microscope.
But let nobody imagine that his difficulty ends
When he finds his "hated rival" is an oil-immersion lens!

So when Harris used to call on her he found to his dismay,
She was quite inclined to view him in a scientific way;
Till one night as he gazed at her, his whole soul in his eyes,
She gave a sudden start and said in tones of glad surprise,

"Your obliquus internus I am certain has a twist,
Please take me with you when you go to see the oculist.
And then if he should operate while I was standing by
I could see your trochlearis and your motor-oculi!"
Now it wasn't clear to Harris just what purpose it could serve,

To display his trochlearis even if he had the nerve!
So he said to her, "I'm willing to suffer or to die
To show my love but *not* to show my motor-oculi."
"I love you very dearly, but it doesn't flatter me
To be studied from the standpoint of Gray's Anatomy.
If you could only see my heart"—"I wish I could," said she;
"I should so love to study those chordæ tendineæ!"

Poor Harris was discouraged—it was not a pleasant fate
To be studied as a "subject" that is quite beyond debate!—
Till suddenly a light broke in upon his darkened mind,
For a lover must have insight though Love himself is blind.

And a girl with a diploma can be won without a doubt
If the man is diploma-tic too and leaves his English out:
So soon he found that "amo te, "Mein Liebling," "Aimez vous?"
Met with no opposition where plain English wouldn't do.
And though he'd never dare to kiss a Vassar graduate,
He found her very willing to learn to osculate;

So there was a modern wedding in a Boston church one day
Where the minister omitted the little word "obey."
Now Mrs. Harris studies the antics curious
Of a vertebrate, articulate, real live Homunculus,
Who cooes and kicks and gurgles and "looks *so much* like Sam!"
And yells with all the power of his little diaphragm.

Chicago, Ill. FRANK L. ROSE, M. D.

PRACTICAL POINTS.

My Dear Doctor:

I have been much interested in the subject of dosimetric therapeutics for the past ten months. On the whole, I can speak favorably. I have tried the granules faithfully in a good many affections and am pleased with the result.

Do you invariably apply Shaller's rule in the treatment of children? I have done so, but failed in many instances in getting the desired result. Just in the treatment of children dosimetry ought to be a sure and trustworthy method; however, it seems to have been a failure with me, to my great disappointment. However, I will not give up but try the more faithfully.

What standard work do you go by in diseases of children and their treatment? I am in possession of all the works on dosimetry you recommend. However, I find there is still a great lack. I miss a work on dosimetric pharmacy, or rather pharmacopœia, where all the many good things that have been thoroughly tested and proved for the past ten years ought to be collected in book form and published, even all the good published in the CLINIC for so many years.

In none of Burggraeve's works, by the way, do I find a rule like Shaller's. Dr. Waugh's work, "The Treatment of the Sick," is not by any means a standard with me, nor with a good many of my friends. I think Castro's work to be the best.

I am just on the point of fixing up my buggy-case, and I am very anxious to carry with me a complete set of dosimetric granules or rather tablets, as I much prefer the latter. Now, you would do me the greatest favor if you would be kind enough to give me your selection as you carry it with you, or even more.

I suppose you are acquainted with Chanteaud's compound granules. These appeal to me a good deal. What do you think about them? There is a list of some twenty or more published. I am only anxious to make the subject of dosimetry a thorough study. I am not a mere enthusiast. I try medicine faithfully and with intelligence at the bedside, meet the indications, and then judge according to the result. I am liberal-minded and take hold of every good thing in any system of medicine.

If I am not mistaken I think you intend to publish soon one or more books about dosimetry. When will the book or books be ready?

In office practice, which of the granules do you always keep on hand?

Now, I would thank you, dear Doctor, for answering my letter as fully as you are able, and hope to receive from you much encouragement. I desire with all my heart to make the practice of medicine a success, and like to know and have on hand all the very best for the treatment of disease.

T. A. LEHMANN, M. D.
Long Island City, N. Y.

—:o:—

I am glad to know that you are so deeply interested in this subject. Men of your experience and age generally take very kindly to the theory, having learned many things and unlearned many more since the days of their graduation.

Shaller's rule cannot be applied universally in the handling of the granules; no, not by any means. It only applies with nicety to aconitine amorphous, gr. 1-134. The dose of any drug, properly selected and applied, is "enough to produce the desired result." As you progress further and get more into the spirit of the subject, you will find that the alkaloids are thoroughly reliable and that the dosimetric method, small doses frequently repeated until the desired result is pro-

duced, is the most satisfactory method of medication yet devised.

There is no general work on dosimetric pharmacy. Our knowledge has to be picked up here and there in the various books which I recommend, and especially from the CLINIC, in which is mirrored the experience of workers in the field. Such a general work as you speak of would be a great blessing, and no doubt something of the kind will be prepared one of these days. Thus far the burden has been more than I could bear. I am republishing the old files of the CLINIC so as to perpetuate the better portions, and when ready it will be duly advertised. I believe it will fill a great and pressing need.

Shaller's rule is not to be found in Burggräve's books. It is original with Shaller. Burggräve's idea is just simply to give enough, that's all.

I am glad to have you speak so kindly of Castro's work. It is a grand effort and is worthy of a more extended use.

For your buggy-case I advise the A. A. Co.'s satchel case No. 1, and inside of this the hand-case No. 5, which was devised by the writer personally as the best outfit for the granule doctor that is to be had. Let it be granules, Doctor, and not tablets. The former fill the bill better in every way, and more perfectly carry out the idea of dosimetry than the tablet does.

What is there to be said in favor of it that cannot be said of the granule?

Chanteaud's compound granule formulas are good ones. Many of them were first devised by the A. A. Co., and his publication of these formulas and preparation of these granules is in direct copying of their work. They can supply any of them that you want. Some are already in their list and have been for years.

Regarding the publication of new books, we are already working on something, and whenever we have anything

ready it will be duly announced. There is nothing in sight just now.

You ask me what granules I always keep on hand and I will say frankly that while I keep a large assortment, my bottles of strychnine, aconitine, hyoscyamine, Waugh's Laxative, colchicine, lithium benzoate, emetin, codeine, morphine glonoin, Infants' Anodyne and remedies of this class, get empty quickest. My Nuclein (Aulde) bottle always requires filling, and the shelf on and remedies of this class, get empty quickest. My Nuclein (Aulde) bottle always requires filling, and the shelf on which I carry Saline Laxative is too often empty. These, with the addition of calomel, the Intestinal Antiseptic and some few alteratives, with saccharine to sweeten and carmine to color, do the bulk of my work.

Dr. Waugh's book was not prepared as a text-book on Alkalometry, but as a collection of the results of his practice and reading for over 25 years. It is probable that were he to write it now there would be more Alkalometry in it, though he does not advise or practise that method exclusively.—ED.

AMENORRHEA.

A young lady suffered from stoppage of the menses, spasm of the glottis, cough and spitting of blood. I saw the case in consultation. We put her upon glonoin two granules, and hyoscyamine amorphous one granule, every two hours; with fluid extract of jaborandi ten drops, and one granule of Waugh's Anodyne, every twenty minutes. This treatment was instituted in the evening. By next morning the menstrual flow had appeared and the patient was discharged, as needing no other treatment. One more wonder for the alkaloidal medication.

J. T. ELLIS, M. D.
Eagle Cove, Tex.

THE ALKALOIDAL CLINIC.

A MOTHER AT ELEVEN.

I was called to see Ada D., colored. Her father came to me, stating that his little daughter had been ailing for about one month and was taken that morning with something like cramp colic. On my arrival I found the patient was suffering much pain. Not knowing at this time the nature of the trouble I examined pulse, temperature and tongue. I then asked her to locate the pain. She said it was in the abdomen. I examined this region and found her abdomen enlarged. I then examined the breast and found it larger than usual. I questioned the mother about her menstrual periods. She told me they had appeared three times and then ceased nearly a year ago. I asked if she knew that her daughter was pregnant. She said she did not. I told her that was what was the matter with her. The father and mother, almost overcome, said they could not believe it, for she was too young. Then we began to question the girl, but she denied the possibility of pregnancy. I then repeated my examination more thoroughly. When I had finished I said: "Ada, it is useless to deny it any longer." She said that there was nothing of that kind the matter with her. I told her it was either pregnancy or she had a very large abdominal tumor, and it was not likely that a girl of her age would have abdominal tumors, also that there was movement in it. She still denied it to me and to her parents. I then exposed her breast to the mother and told her that it was too plain to deny. I made a vaginal examination and found the os dilated about the size of a silver dollar. At 3 p. m. she was delivered of a male child, weighing five or six pounds. It was still-born. She did as well as could be expected.

I wish to know whether any other physician can compete with me in this case?

I do not suppose I will ever attend another case so young. Her age was 11 years, 9 months, and 9 days, at the birth of her baby. Her mother said that her breast was developed at eight years. The pubes was almost destitute of hair. Brethren of the CLINIC family, let me know your experience in such cases.

JOSEPH J. PARKER, M. D.
Winfield, Texas.

—:o:—

Doctor, can't you induce your legislator to favor castration as a punishment for rape?—ED.

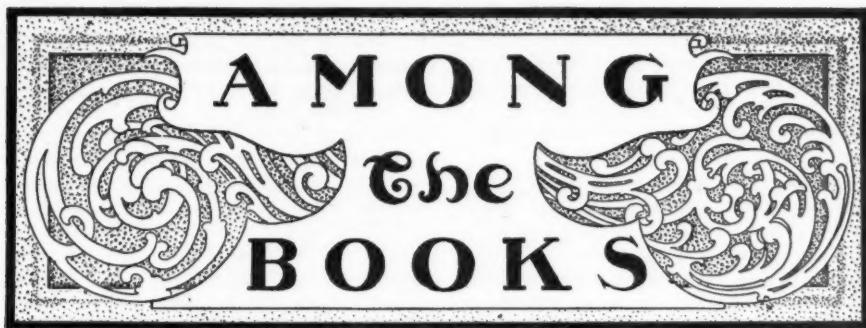
A PROTEST.

In the May number of the CLINIC, in your note appended to Dr. Brewster's Ontario letter, you say: "The Lord is good to the Bluenoses," etc. Now, I protest that the Ontarians are not Bluenoses. They may claim the appellation and try to steal the title, but it is ours by inalienable right. For it was first applied to us as Nova Scotians by our own author and humorist Judge Haliburton, "Sam Slick." Ontario has stolen a lot from us since this confederacy of provinces was formed, but we cannot allow her to purloin our specific cognomen, "Bluenose." Our noses may be blue but our hearts are warm and our livers are not white, and our abdominal viscera generally are in good working order. Call the Ontarians Kanucks, call them anything, but do not call them Bluenoses.

N. F. CUNNINGHAM, M. D.
Dartmouth, N. S.

—:o:—

We humbly beg pardon. We thought all Canadians had blue noses. Went ducking there once, and ever bird we shot was a bluebill!—ED.



AMONG the BOOKS

Tuberculosis: Its Nature, Prevention, and Treatment, with special reference to The Open Air Treatment of Phthisis, by Alfred Hillier, B.A., M.D., C.M. With thirty-one illustrations and three colored plates; 256 pages; size 5x7½; cloth, \$1.25 net. Cassell & Company, Limited, New York.

Just sit down and write to Dr. Casey A. Wood, Post-Graduate Medical College, Chicago, for a copy of his paper on "Headache from Eye-strain; Its Diagnosis and Treatment." In the accompanying astigmatic chart he gives the following characteristics of ocular headaches.

"1. Forty per cent of all chronic headaches and eighty per cent of all frontal headaches are partially or wholly of ocular origin.

"2. Their site, in order of frequency, is (a) supraorbital, (b) deep orbital, (c) fronto-occipital, (d) temporal, or (e) a combination of these.

"3. Near work is their chief exciting cause, *i. e.*, reading, writing, drawing, painting, fancy work, typesetting, type-writing, sewing, music, etc.

"4. Patients suffering from headache often observe that other eye symptoms, (see 6 and 8), also result from use of the eyes for near work—especially with artificial illumination.

"5. Shopping, theater and church going, as well as riding in street cars and railway trains, often induce it.

"6. The letters and lines in reading and notes in music blur, run together and get 'mixed up.'

"7. The patient with ocular headache is generally astigmatic or far sighted, or

has some other refractive error, or has some weakness of his ocular muscles.

"8. Patients with ocular headache often complain of lachrymation, photophobia, foreign body sensations, specks floating before the eyes, itching and burning of lids, redness of eyes, etc.

"9. The signs of eyestrain above mentioned may be present and the headache be of ocular origin, although the vision is normal and there is no manifest astigmatism. The patient, in such a case, overcomes his hypermetropia or astigmatism, or both, by continuous muscular effort.

"10. About ten per cent of all ocular headaches are incurable, and some of these are hereditary."

From the press of W. B. Saunders comes *The International Text-book of Surgery*, by American and British authors; edited by J. Collins Warren of Harvard, and A. Pearce Gould of Middlesex (England). The work is in two volumes, one on General and Operative Surgery, of 947 pages; the other on Regional Surgery, of 1072 pages. Fifty-eight of the foremost surgeons of the two countries contribute to the work, which requires 17 colored plates and 929 other illustrations!

There can no longer be much question as to the superiority of surgical works of this cyclopedic structure, where the field is divided among a number of authors, each chosen for his special knowledge of the topic assigned him. The result is a collection of monographs, of merit far more uniform and of higher grade than when one man attempts to cover the entire department alone.

THE ALKALOIDAL CLINIC.

We can recommend this work to any readers who need (and who does not?) the latest authoritative system of surgery. Price, cloth, \$5.00 per volume.

Imperative Surgery. By Howard Lilienthal. Published by the Macmillan Co. The author deals with the surgery a doctor has got to do, whether he wants to or not, whether he is posted, ready, or rusty and unprepared. It is the surgery of the doctor who is not a surgeon, don't like surgery and don't do it; but who just has to do it sometimes.

It is a novel idea, and the author has developed it in an original and striking manner. He takes up the use and selection of instruments and appliances; wounds and their treatment; operating in a dwelling-room; healing of wounds; infection; surgery of regions; hernia, appendicitis, peritonitis, etc. There are 153 illustrations. The paper is very heavy, smooth, simply luxurious, and the illustrations are that much better. And yet the price is only \$4.00.

The Surgical Diseases of the Genito-Urinary Tract, Venereal and Sexual Diseases. By G. Frank Lydston, M. D. Illustrated with 233 engravings. Pages xvi—1024. Extra cloth, \$5.00, net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

Dr. Lydston has taken time and space to cover his ground fully and has done it. The book is by far the most complete we have yet examined, and constitutes a full and comprehensive treatise on this specialty. It is what you need.

That enterprising publisher, W. B. Saunders, presents the seventh volume of his Hand Atlases, this one being a translation of Mracek's work, by H. W. Stelwagon. The volume contains 199 pages, 63 colored plates and 39 full-page half-tones, and sells at \$3.50. It is a very handy book, suitable for any one who wants a good illustrated work on skin diseases at a very moderate price.

The Macmillan Company has issued a *Manual of Surgery*, by Charles Stonham; in three volumes, aggregating 1451 pages, with 445 illustrations. It is char-

acteristic of the immense growth of modern surgery that such a manual, which twenty-five years ago could have been comprised in one of these volumes, can only be limited to the three by leaving out the historic parts and treating the various topics merely in outline. Here is the scope of the work—not to replace the systematic treatises, but to give the busy practitioner a handy outline which he can fill in from his own consciousness. Like English works in general, the tone is conservative, the condensation admirably done, the balance well kept between the various parts, and altogether it forms a safe practical guide. The price is remarkably small—only \$ 6.00 for the three volumes.

Injuries to the Eye in their Medico-Legal Aspect. By S. Baudry. Published by The F. A. Davis Co. Pages 161. Price \$1.00.

Now, Doctor, if you wish to know the medico-legal relations of that eye-injury that gave you so much trouble, send for this little book. It has been Americanized by Charles A. Oliver, and a Philadelphia lawyer, so it must be just what you need.

The Anatomy of the Brain. By R. H. Whitehead. F. A. Davis Co., publishers. Price \$1.00. Dr. Whitehead is Professor of Anatomy in the University of North Carolina, and is a teacher who felt so great an interest in cerebral anatomy that he determined to combine in one small volume the merits of the various text-books, and the investigations that are almost too recent for the text-books, and this is the result. It is said to be for students, but we would say the book is intended for the more advanced types of practitioners.

The Macmillan Company issue a volume on *Diseases of the Genito-Urinary System*, by Eugene Fuller. Cloth, pp. 774, 137 illustrations. The work is handsomely printed, the part treating of vesical calculus exceptionally valuable. The price is \$5.00

Another recent publication of the same company is Oppenheim's *Medical Diseases of Childhood*; 653 pages, 101 half-

tones and 19 charts. Price \$5.00. The subjects are treated from the anatomic rather than the clinical standpoint hence the doctor who desires information on cholera infantum or summer complaint will not even find them in the index. But the author's therapy displays a simplicity truly admirable. He uses single remedies and the metric doses, and relies greatly on calomel and bismuth subgallate, instead of repeating the useless, senseless formulas of the past.

Since the appearance of Henry George's "*Progress and Poverty*," no book has taken so deep a hold on the problem of land monopoly as "*The Land Question, From Various Points of View*," planned and published by Dr. C. F. Taylor, of Philadelphia. The spirit of the book is that of earnest search for the truth, and an open mind for every phase of thought and feeling on the subject. The scope of the volume may be indicated by the following sub-titles:

A Brief History of Land Tenures and Titles.

Distribution of Land in Various Countries.

Alien Landlordism in America.

Our System of Distributing the Public Lands.

Constitutions and Comments.

Religion of the Land Question.

Two Parables.

Forestry.

A Criticism of the "Single Tax."

Reply to "A Criticism of the Single Tax."

Memorandum in Relation to "A Criticism of the Single Tax."

John Stuart Mill's plan of Land Reform.

The chapters have been prepared by men thoroughly at home with their topics, some of them being widely known by previous work in relation to land monopoly. Students of the land question cannot afford to be without this volume. Price, paper, 25c.; 246 pages. "*Equity Series*," No. 2, 1250 Chestnut Street, Philadelphia.

Among the books engaged for the Citizen's Library, edited for the Macmillan Company by Professor Richard T. Ely, mention may be made of one on "*Muni-*

pal Engineering and Sanitation," by Mr. M. N. Baker of the Engineering News of New York.

Lea Brothers & Co. present the first volume of *Progressive Medicine*, a quarterly digest of advances, discoveries and improvements in the medical and surgical sciences, as estimated by Hobart A. Hare and C. A. Holder. The volume contains 428 pages, some excellent illustrations, especially the colored plate showing Koplik's spots in measles.

Dr. H. A. Parkyn sends us the second edition of his mail course on *Suggestive Therapeutics and Hypnotism*, now grown to a volume of 334 pages, with illustrations showing methods of hypnotizing, etc.

From W. B. Saunders we have received the second edition of Levy and Klemperer's *Elements of Clinical Bacteriology*, a text-book for students and physicians, 441 pages, many illustrations; price \$2.50. A very excellent work, full, practical and trustworthy.

The Annual of Eclectic Medicine and Surgery. Edited by John V. Stevens, M. D. Vol. 8, embracing the papers and proceedings of the various State Eclectic Medical Societies for the years 1897 and 1898. 8vo., 538 pp. Cloth, price \$2.00. The Scudder Brothers Company, publishers, Cincinnati, Ohio, 1900.

There is a plentiful supply of therapeutic hints in this volume, by no means to be ignored by any physician who feels he wants all the means attainable to aid his patients in recovering. We would recommend this book to our readers. They are assuredly well read if they fail to obtain from it the full value of their investment.

E. B. Treat & Co. issue the 1900 volume, the 18th, of their *International Medical Annual and Practitioners' Index*; the largest and best of the series. Plates, 261, pages, 748. The therapeutic review is by Murrell. It is a handy book, and the compilation is a good one.

Essentials of Surgery. By Edward Martin. W. B. Saunders, publisher.

THE ALKALOIDAL CLINIC.

Price \$1.00. If students will use compends, this is about the best of them.

Alcohol Dangerous and Unnecessary Medicine. How and why. What medical writers say. By Mrs. Martha M. Allen. Published by Chas. C. Haskell & Son, Norwich, Conn.

More power to you! Keep putting the truth at them till they must take notice; and till doctors give up this dangerous remedy for better agents of treating their patients.

AN ADVERTISING NOVELTY.

Three specimens lying on our table illustrate a new departure in the art of advertising. From the biological laboratory of Frederick Stearns & Co. comes a brochure on Serum Therapy, giving an account of the various protective serums now employed in the prevention and treatment of diseases of microbial etiology. Questions concerning these are constantly coming up, and the doctor needs something at hand to refer to at short notice. So here is the booklet, an advertisement, but too valuable in itself to be thrown away.

Johnson and Johnson, in No. 11 of "Red Cross Notes" present "A Study of Germs." The various forms of micro-organisms, noxious and otherwise, are described and illustrated by colored and black cuts. From this the study of surgical dressings is deduced, and the Red Cross appliances are brought in.

The Palisade Company issue "*The Essentials of Hematology*," a handsomely illustrated practical guide to the clinical examination of the blood for diagnostic purposes. It treats of the microscopic and chemical examination of the blood, and gives a number of colored plates showing the cells in various conditions and the hemic parasites. Of course Hemaboloids come in for incidental recommendation.

All three are frankly advertisements, but give the reader an epitome of information on these subjects too valuable to be thrown away.

Billy Baxter's Letters. By Wm. J. Kountz, Jr., Duquesne Distributing Co., Harmanville, Pa. A man has to have a pretty bad case of auto-

toxemia who can gaze at the frontispiece without grinning; and if he once begins to read his mouth never goes shut till he has finished the last page. Pure fun, clean fun, every word of it. Even the fact that it is advertisement of Red Raven Splits does not spoil it.

The Banning O & M. T. Co. of Fort Wayne, Ind., have issued an illustrated catalogue of their apparatus that deserves a big word of commendation. This family of doctors has made a hereditary study of deformities and ailments necessitating mechanical support, and in this modestly named catalogue they present a valuable scientific treatise. We commend it to your attention.

CHEMISTRY IN MODERN LIFE.

The disinfection of the sick-room and the antiseptic methods which go far toward the creation of modern surgery all depend upon chemical products whose long list increases year by year. Crude drugs are now replaced by active principles discovered in the laboratory—morphine, quinine, and the like—and instead of the bulky, nauseous draughts of olden time, the invalid is given tasteless capsules of gelatin or compressed tablets of uniform strength and more accurately graded power. A great part of physiology consists of the study of chemical processes, the transformation of compounds within the living organism, and practically all this advance is the creation of the nineteenth century. Modern bacteriology, at least in its practical applications, began with a chemical discussion between Liebig and Pasteur as to the nature of fermentation; step by step the field of exploration has enlarged; as the result of the investigations we have preventive medicine, more perfect sanitation, and antiseptic surgery. The ptomaines which cause disease and antitoxins which prevent it are alike chemical in their nature, and were discovered by chemical methods. Physiology without chemistry could not exist; even the phenomena of respiration were meaningless before the discovery of oxygen. The human body is a chemical laboratory, and without the aid of the chemist its mysteries cannot be unraveled. — *Clarke, Popular Science Monthly.*

Condensed QUERIES Answered

PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage, and would be pleased to hear from any reader who can furnish further or better information. Moreover we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it.

REPLIES TO QUERIES

Reply to Query —. April CLINIC. To prevent nausea and vomiting from anesthetic give a hypodermic of morphine sulphate gr. 1-4, atropine gr. 1-150, thirty minutes before the anesthetic.

W. A. REBO, M. D.

Alexandria, Mo.

CHEMICAL EXAMINATION OF URINE. In answering Query No. 1291 I will say: That the best test solution for sugar in the urine, and one that is perfectly stable, is made as follows:

Rx Cupri sulph.....gr. 30
Aqua destillata

Glycerini aaoz. 1-2

Liquor potassæoz. 5

Dissolve the copper in the distilled water, by gentle heat. When cool add the glycerin and sol. potash, then filter.

To Use—Boil two drams of the test solution, then add 6 to 8 drops of the urine and boil again. If there is any sugar, it will appear as a yellow or yellowish-red precipitate. Be sure not to add more than 6 to 8 drops of urine. This solution will keep almost indefinitely and is the most reliable of anything I have used. I have long since abandoned the Fehling test, because the solutions are not stable, and not near so sensitive as the one mentioned above.

The prescription given is only for qualitative test, but it is as necessary to know the quantity from time to time as the

mere matter of whether there is sugar or not.

If you have a case of diabetes mellitus, you should be able to know whether the per cent. of sugar is increasing or diminishing under treatment. In order to do this the following will give approximate results:

Rx Cupri sulph.....gr. 22
Potassæ hydroxidgr. 107
Ammonia fortoz. 4 1-2
Glycerindrams 3
Aqua destil, q. s. ad.....oz. 10

Dissolve the copper and potash in two ounces each of the water, by gentle heat; when cool, mix and add the glycerin and ammonia.

To Use—To ten drams of boiling test solution, add urine slowly till the blue color is exactly neutralized; this will take just one-third grain of sugar, so that by knowing how much urine it takes to dispel the color, we can tell how much urine contains one-third grain of sugar, and, by knowing how much urine is passed in the 24 hours, we will know the total quantity of sugar excreted. In all cases of chemical examination, the urine should be obtained fresh and be filtered before test is applied.

Here is also a good test for albumen, much better than the old "nitric acid" test. Make a solution of potassa ferrocyanide 1 to 20 of distil. water; this will keep for a long time.

To Use—Take about two drams of urine, add ten drops of acetic acid di-

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lute, and half-dram of the test solution. In a few minutes a white or milk-white opacity will occur, which is albumen. This test does not require boiling, and will not precipitate the phosphates and other substances as in the nitric acid test.

In tests for sugar or albumen either, no decision should be made until several specimens of urine, extending over a month, have been examined. If sugar or albumen is a constant factor, and in appreciable quantities, you may then form your diagnosis with a degree of certainty. It is now supposed, by some good authorities, that sugar is one of the normal constituents of the urine, but in very minute quantity; with this I am inclined to agree, after many years of observation. In cases of any considerable note, or where our diagnosis may be called in question, we should not make a positive diagnosis, as to the absolute condition of the kidneys, without a microscopical examination, as there are many conditions that cannot be demonstrated chemically. But as to sugar and albumen there can be no mistake chemically. Urea is one of the most important constituents of the urine, as it occurs in greater quantities than any other single solid. When urea is not properly eliminated, we have uremic convulsions; this is especially noted in puerperal eclampsia.

I believe all cases of pregnancy should be examined, during the last month, as to the proper excretion of urea. It is often that there are no well defined symptoms before the time of accouchement, that would lead us to expect the dire results that follow this condition, or warn us to be prepared. Examinations of the urine give us the best general information obtainable, as to the conditions of our patient, or anything we can do. I have often discovered large quantities in cases a year or more before any serious, or even suspected, symptoms were observed by the patient.

I believe diabetes mellitus is a curable disease, as I have several undoubted cases to my credit. The medical profession do not give the prominence to urinary examination that its importance deserves. Of all the excretory functions, none will give the general systemic conditions so well as the urine. In fact, no

serious disease can long continue, without reflecting itself through the urine.

J. R. ETTER, M. D.
Crawfordsville, Ind.

Report on Query —. I write to report progress, and to ask advice in several cases. First, the man with syphilitic and gonorrhreal diathesis, who had twitching nerves, cystitis, premature ejaculation, enlarged prostate, etc. Cystitis cured by euophen-aristol with petrolatum injection, nervous disturbance nearly gone under strychnine arsenate, but the prostate and urethra are quite sensitive yet. Can pass No. 16 Am. sound easily, but it gives pain in the prostatic urethra. I treated him each alternate day for two months, then let him go a week, could see no difference in the condition. Have given Thialion (lithium benzoate with salines) to regulate bowels. He gained in flesh and feels fine except as to waterworks.

Two cases endometritis, lacerated cervix, followed directions closely, resulted in severe pains lasting twenty-four hours, sore across abdomen and iliac region and stiff, with tympanites for several days. Scanty bloody discharge from uterus. Did not repeat treatment for a week in one case, and when I did the same result obtained, in a less degree however. The other case, which was the worst, treated ten days ago. I have used depleting and antiseptic suppositories, together with B. U. T. and electricity, vaginal electrode internally, sponge over ovaries. Electricity took out soreness quickly and acted as sedative given on retiring. Considerable pain and soreness in left ovary yet. The other case seems to be improving rapidly now, but has severe pain after each treatment, lasting one to two hours. Pruritus vulvae after much experimentation responded to solution of menthol and carbolic acid, after one application. Many other cases in seeming worse condition have suffered no inconvenience from the same treatment. Thinking possibly others have had similar experience, but have been fortunate in determining the cause of the trouble and have reported to you, I write with the hope that you may be able to give me light and advice.

L. R., Cal.

Evidently there was some unusual irritability in the cases you mention. I would suggest the use of electricity and a depleting local treatment until there is no longer any tenderness present. One correspondent wrote that similar symptoms followed the injection, but when he applied the same mixture—A. E. Pet., with a cotton-wrapped probe—no irritation whatever followed. You might try this if you feel like it, and see if it makes any difference. Possibly the hard end of the rubber syringe might cause pain. See editorial note on this subject.—ED.

Report on Query _____. I promised to report to you on a case of malaria about which you advised me. The arsenates and berberine seemed to have had a very good effect, the chills stopped and she improved very well until she went away on a visit. There she was taken with influenza, returning to her father's deathbed. During this time I stopped the medicine and she developed chills again, which were again stopped by the same treatment. Had it not been for her influenza and her father's illness the remedies would have entirely stopped the chills. They did better than anything else she has tried and I expect her to continue them until cured.

A boy with recurrent attacks of sick stomach for whom you advised Anticonstipation granules two years ago, continues to do well. I have not been called to see him since he began taking them.

J. F. S., N. C.

I would add Nuclein (Aulde) in full dosage, to secure a more permanent effect from the arsenates.—ED.

QUERIES

Query 1403:—SCIATICA. Give treatment for sciatica. Does coca cola contain cocaine? I don't use it but I see my friends using from eight to twenty-five glasses a day.

W. S. C., Va.

Coca cola contains cocaine, and these men are forming a cocaine habit.

In regard to sciatica, here is a list of remedies. (1) Massage to loosen up morbid deposits along the nerve. (2) Lie on your back and with knee held stiff, flex leg strongly on abdomen, to stretch the nerve and free it from adhesions. (3) Inject hypodermically gr. 1-60 of atropine near the most painful spot. (4) Apply a small blister accurately over the sacro-sciatic foramen. (5) Take ammonium chloride 30 grains every 8 hours, in as large a draught of water as you can drink at one time. (6) Envelop the leg in Pyrofistine. You will know which of these suggestions would be most likely to benefit you.—ED.

Query 1404:—SPASMS. PARALYSIS. Woman, 70, frequently sick last twenty-five years, eczema for thirty years; three years ago had epileptic convulsion affecting left side, left limbs rigid. Since then the convulsions have occurred at irregular intervals from one to three months apart. The spasm is continuous, passing off only after large doses of morphine and atropine hypodermically. She is quite feeble between attacks, and has had indigestion for several years.

Can any remedy benefit cerebral hemorrhage in a man 70 years old? Occurred two months ago. Paralysis of left side complete at first, in about three weeks regained very slight movement in limbs but is now losing it. Indications of cerebral softening. Am now using electricity with no benefit.

J. H. R., Mo.

Spasm coming on so late in life is significant of organic disease of the nerve centers. Keep her bowels regular and aseptic. Stimulate the nerve centers by avenin and zinc phosphide, gr. 1-6 each, given every two hours through the day. Regulate her digestion carefully. For the spasms give glonoin, hyoscyamine and strychnine arsenate, one granule of each every fifteen minutes until effect.

In case of the man: You can do this for paralysis, first stimulate absorption of debris by giving iodoform, gr. 1-6 every

hour while awake. Second, combat the cerebral innutrition by giving strychnine arsenate gr. 1-134, zinc phosphide gr. 1-67 and avenine, one granule each every two hours through the day. Keep the bowels regular. At the age mentioned the prognosis is not usually considered very good, but you must make these people comfortable for ten years yet. Sometimes the hypophosphites in very large doses do much good; Fellows' Syrup, two drams four times a day.—ED.

Query 1405:—VESICAL PARESIS. Lady, 66, good health but dribbling of urine every time she coughs, sneezes or makes extra exertion for ten years, saturates five napkins a day. Urine normal except a strong smell.

I dislike very much to have the queries run through the ad. pages.

A. B. C., Calif.

Give the lady dilute nitric acid, twelve drops before each meal, and a granule of brucine every hour while awake, with one drop tincture of cantharides in each dose. If not better in a week you had better use electricity—galvanism—the positive pole in the urethra and the negative over the pubes.

It is very hard work to find all the room we want for queries. In one issue we "swiped" a few columns from the advertising manager, and would do it again if we could catch him asleep, which is not very often the case. It was a question of taking that space or leaving out the queries, and under the circumstances we took all we could get and only wished we had a chance to take more.—ED.

Query 1406:—URTICARIA. Kindly outline treatment, both dietary and medicinal, for chronic urticaria. Patient has been troubled for years. It comes daily regardless of his diet. Not constipated, no dyspnea, no organic trouble of nervous system.

S. R. J., Va.

Treat each outbreak with a full dose of pilocarpine, a mild mustard bath, keeping the bowels clear with Saline Laxative and giving seven W-A Intestinal Antiseptics daily. Let the diet be largely vegetable. If after two weeks of this treatment there is no perceptible improvement, add to it zinc phosphide, gr. 1-6, four times a day.—ED.

Query 1407:—VOMITING. Maiden, 24, anemic, menses stopped last December, no pain, tenderness or swelling, vomits every day, grass-green excreta one day, thick and yellow as yolk of egg the next day. Eats anything, vomiting usually first thing on awaking in morning. Has been treated by several physicians for stomach trouble. I diagnose stenosis or occlusion of ductus communis choledochus. How far wrong am I? To-day she complains of soreness between shoulder-blades.

A. J. B., Mo.

I judge from the symptoms that that young woman had better commence making doll-clothes. If she had stenosis of the gallduct she would have jaundice. If there is no jaundice you had better put her on the exclusive milk diet, give her cerium oxalate, one granule, and bismuth subnitrate, six granules, repeated every ten minutes when she is sick at the stomach. Also give her iron arsenate gr. 1-67, potassium permanganate gr. 1-6, and sanguinarine nitrate gr. 1-67, each repeated every hour while awake. Add to this one tablet of nuclein, two minims, every two hours through the day. Keep her bowels regular with Saline Laxative, or better still, with Waugh's Anticonstipation granules. This will aid in stimulating the menstrual function if it needs it; but you had better investigate that case personally, taking nobody's word for it, before beginning treatment.—ED.

Query 1408:—IDROSIS. I have catarrh in my head, and my head sweats so that when I am sitting still in my

office the perspiration runs down my head as if I had a sprinkling can hanging above and the water running over my head. When I am in an open car there is a draft continually running over my head. I am almost bald and have neuralgia in right eye, tears dripping continually.

M. B. J., O.

Sweating of the head is generally an indication of weakness of the heart, and you had better take Cardiac Tonic (*cactus*) and agaricin, each from three to seven granules a day. Keep your bowels regular also, and do not drink any more water than you can help. What you do drink should be hot. Never drink iced drinks of any description. The tone of the cutaneous capillaries may be improved by bathing with a mixture of hamamelis and bay rum, with five grains of chromic acid to the ounce.—ED.

Query 1409:—**SYPHILIS. TOXEMIA.** The W-A Intestinal Antiseptic tablets were given to the patient with chronic diarrhea in connection with copper sulphate, gr. 1-12. There is already considerable improvement.

Man, had syphilis six years ago, diagnosis made from sore; never had eruption, mucous patches or other symptoms which might be conclusive evidence. Glands of neck, groin, and axilla are all enlarged, but patient states he has always noticed enlargement of these glands. In right groin several glands broke down five years ago, after the initial sore, and were long healing under proper treatment. At this time the ulcers are perfectly healed, the cicatrix is partially white and part copper-colored. Could he have had syphilis without other signs than those above described? There is now a slight abrasion on the penis from a scratch, which has healed very rapidly after a slight induration.

Could he contaminate his wife by intercourse? Is there any way to prevent contaminating the children by medicating the wife during pregnancy? Please state what is the best treatment.

Man, 25, eight months ago stepped on something and abraded the foot. Shortly

after the foot began to swell, was very painful, extending up the leg, glands enlarged. Diagnosis, blood-poisoning. After recovery an eczema developed on plantar and dorsal surfaces of foot; swollen, red and hot. This on several occasions I have entirely cured with various treatments, but it returns. Before he had blood-poisoning or eczema of foot, had eczema of lower lip, which becomes swollen, red, hot and cracks form, light-colored scales. This becomes more severe when foot is worse. No history of syphilis, have tried him on antisyphilitic treatment with no effect. What treatment will relieve eczema and prevent recurrence?

M. S., Ala.

In the syphilitic case it is evident that the original infection has been deeply modified by treatment, but the disease is not dead. The children would undoubtedly show the effects of it and contaminate the wife during pregnancy. Place him upon the use of blue pill, giving three grains three times a day, adding one daily dose every two or three days until it commences to affect the gums. Then drop one daily dose of three grains and continue for at least six months. No other mercurial is so active as this and no other treatment has given me as good results.

During the treatment let him drink abundance of water, at least two quarts a day, and also give him small doses of atropine, in order to prevent the affection of the mouth as much as possible.

In regard to the second case: I think this is one of staphylococcus infection. Put him on arsenic sulphide, a granule three times a day till he commences to show arsenical signs, itching and puffiness of the eyelids, then lessen the dose somewhat and keep on. Keep his bowels clear and render them aseptic with the W-A Intestinal Antiseptic. Limit the amount of meat which he eats, as these people are apt to be uricemic from overuse of nitrogen; and give him one of the

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powerful vitalizing tonic-nutrients, like Wampole's preparation of cod-liver oil.

Locally, I would prefer the officinal ointment of red oxide of mercury, adding 30 grains of acid benzoic to the unguent. I see no evidence of syphilis in this case.—ED.

Query 1410:—MUCOUS COLITIS. A mother, 35, small, nervous, Feb. last had neuralgia internal to right nipple, soon extending to arm and sides, temporarily controlled by mild anodynes. She once complained of gas on stomach and poor appetite, and was very nervous, thinking she might have cancer. March last she noticed mucus in stools, increasing to two or three passages a day. Some were clear white jelly-like passages with the peculiar odor of a new-born babe. Consultant called it subacute gastric catarrh. No nausea or distress after eating, ravenous and changeable appetite, sometimes feel entirely well but generally has a bad feeling, aching, raw dull pain up the right side of sternum with tender spot size of palm of hand between the right nipple and sternum; follicles of tonsils filled with cheesy material for a month, patient complaining of throat at spells. Capsules pass undissolved, breaking down in four minutes in clear warm water. Patient abhors milk.

S. H. R., N. Y.

There is something peculiar about that case, and my advice to you is, first, to have a bacteriological examination made of the mucous plugs from the tonsils, and of the feces. My impression is that you will find tubercle bacilli in both.

For the diet I would recommend the white of egg taken raw, rye flour baked brown and made into a pap with hot milk, and well baked plain crackers, with a good malt extract like Maltine, with pepsin and pancreatin. She had better also have some fresh fruit juices, oranges or grape fruit being the most easily obtained at this season.

Internally give her cotoin, from seven to twenty granules a day, enough to con-

trol the diarrhea. Keep the bowels clear by a morning dose of Saline Laxative, and aseptic by a sufficiency of Intestinal Antiseptic tablets, and if there is any tendency to straining, wash out the colon with warm water containing Listerine, an ounce to the pint.—ED.

Query 1411:—TOXEMIA. Maiden, 28, bad health for over three years, suffers with constipation, nervousness, leucorrhœa, irregular and suppressed menses, headache (sick or nervous), backache across or between the shoulders or just below, back always weak. Sometimes the aching is now but not often. A spot on each side of backbone and on waist line is sensitive and often attended with acute pain lasting a second. Occasionally has an uneasy feeling near the heart and dull aching across the abdomen and in left side, and running across and down into the hip. She gets bilious, looks pale and is languid. When she takes cold her tonsils often get sore and remain so for a week. Often has cold feet, legs ache and feel heavy.

J. R. O., N. C.

Constipation may be at the bottom of the trouble. Give the lady chloroform and dilate the anal sphincter thoroughly. I have had just such a case, with every symptom you describe, completely cured by this operation. Waugh's Anticonstipation granules would be indicated otherwise, given in the new way, one every half-hour until the bowels open, and this repeated each day. She would have regained health unaided had it not been that her vital forces were deficient, and you will probably find that a course of Fellows' Hypophosphites will greatly aid the treatment.

Besides this, try and restore the menstrual function by giving one granule each of potassium permanganate, iron arsenate and sanguinarine nitrate, each hour while awake during the day.

The spells of sick headache would probably be relieved by a granule of anemonin, one of hyoscyamine amorphous

and one of caffeine valerianate, given together and repeated every half-hour until the mouth begins to dry.—ED.

Query 1412:—CYSTITIS. Male, 50, previous health good, complete retention of urine. Put him on strychnine, iron and tincture cantharides. He gradually regained the power to discharge his urine and dispensed with catheter. He urinates every fifteen minutes, two to four ounces. Sometimes he passes a lump, which he says resembles flesh, membranous. I have not seen this. Occasionally he has straining spells which cause soreness of the hypogastric region. There is some inflammatory trouble of the mucous coat of the bladder, and perhaps the europhen-aristol with petrolatum preparation would be helpful. How often would you use it?

D. C. M., Miss.

The man has catarrh of the bladder, and would be benefited by the use of europhen-aristol with petrolatum, according to directions in the printed circular enclosed. You had better also give him arbutin, seven granules a day, internally. I must again call attention to the value of Searle & Hereth's Tritica in these vesical disorders. This is no ordinary preparation, but one whose effects in some cases are simply invaluable.—ED.

Query 1413:—PHTHISIS. Mrs. W., tuberculous family history, in good health till last baby, fourteen months ago. Has three children under five years of age. Has been doing her housework and nursing a large fat baby, and become very much run-down. Had some cough for a few months but did not expectorate much until the last two weeks. Physical examination reveals nothing but a few bronchial rales; she is constipated, anorexia, skin yellow, urine high colored, sp. gr. 1025, no albumen, no sugar. Since using Anticonstipation granules and triple sulphocarbolates constipation is some better. She persists in nursing the baby which is very much against her.

C. C., Pa.

The report of our laboratory shows the case to be one of chronic pneumonia and

influenza, not yet tuberculous, but that is a mere question of time, unless the woman weans her baby and undertakes treatment in earnest.

For the treatment we refer you to the August CLINIC, 1899, Dr. Waugh's paper, in which you will find all that we could possibly say. Adopt that treatment in its entirety and wean the baby and you can confidently promise a cure. As it is now getting too warm for cod-liver oil, Hagee's Cordial becomes important. It has given us very satisfactory results, indeed.—ED.

Query 1414:—ZOSTER. Lady, 65, shingles at first; they disappeared and she has been in bed three months with intense pain in right side and back. She has spells of pain and the side is very sensitive. Bowels regular and is all right otherwise. The pain sometimes extends as far around as the stomach.

J. A. C., Kans.

The treatment in this case is easy: Keep the bowels regular and aseptic; give the woman zinc phosphide, gr. 1-6, an hour before each meal and on going to bed. The affection is neuralgia, due to degeneration at the roots of the affected nerves.—ED.

Query 1415:—TOXEMIA. Child, age 8, had scarlet fever four years ago, otitis, nasal discharge foul; anemic; urine light color; has eruption on hands and feet alternately, vesicles, then pustules, which break leaving scab, itching and swelling.

H. G., Minn.

This child evidently has an infection of the blood, probably by the staphylococcus, a creature which lies in wait to attack its host whenever below par, weakly or depressed from any cause. I would suggest placing the child at once upon arsenic sulphide, two granules a day, gradually increased to four if well borne; also calcium sulphide, gr. 1-6, and iron phosphate, gr. 1-6, of each seven granules a day. Keep the bowels regular

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with Saline Laxative and use the Intestinal Antiseptics if necessary. Wash out the nasal and aural tracts with Hydrozone whenever there is odor, and at other times with hamamelis.

See to the hygiene of the house and neighborhood, and enforce the sanitary regime of good food, properly taken, fresh air, sunlight, hot salt rubs and such further measures as your knowledge of the case indicates. Sometimes such a case "hangs fire," obstinately refusing to improve, until nutrition is powerfully stimulated. Here is where Sanguiferrin comes in.—ED.

Query 1416:—**GLONOIN.** I wish to ask a question concerning Glonoin:

I took two of the small pellets (1-250 grain each), put up by the A. A. Co., and gave one each to two other parties.

One of the other parties and myself experienced about the same sensations: fullness of the head with throbbing, together with alternate flushing and palleness of the face, followed with a sensation of constriction in the chest, seemingly in the œsophagus.

Subjective symptoms of the third party (a lad of 18 years): Dizziness, numbness of fingers, flashes before the eyes, followed by inability to distinguish objects unless brought very close to the eyes, dreamy sensation, voices sounded as if a long way off.

Objective Symptoms: Paleness about the mouth spreading over the entire face, pupils widely dilated, staggered when walking. All this occurred within ten to fifteen minutes, after which time face became very pale, eyes wide open, pupils fully dilated and momentarily unconscious.

Question—Will you explain action upon third party?

W. T. P., Pa.

Glonoin causes relaxation of arterial tension with determination of the blood to the head. These basal facts may be followed by different symptoms according as the conditions differ. The symptoms of the boy were those of cerebral anemia,

and for some unknown reason the drug evidently dilated some other portion of the circulatory system, leaving the cerebral centers anemic. I am unable to give a more satisfactory explanation than this.—ED.

Query 1417:—**AUTOTOXEMIA.** Dr. M., 43, weight 280, took sick Feb. 19th; temperature 103, while taking tincture ofaconite in large doses. At 4 p. m. Feb. 20th, temperature 104.4, pulse 132, coughing hard but raising nothing, lung congested over a large area, no chill, some gastro-enteritis. Gave Defervescent compound for fever, strychnine arsenate for depression, bismuth subgallate, gr. 5, for the bowels. At 9:30 temperature 99.4, pulse 100, patient feeling better.

On the 21st inst. patient continued better, temp. below 100 all day, pulse 84, stronger.

At 3 p. m. on the 22nd patient awoke and found himself sweating, and by 5 a. m. his clothing was soaking wet. Temp. 97. Gave strychnine arsenate, gr. 1-30 until effect. Dr. A. called. We agreed it was a case of autotoxemia from the bowel. Dr. A. advised salol and sodium salicylate, each gr. v, every three hours; saturated solution of magnesium sulphate, a teaspoonful every two hours, for two days, with a purely milk diet. Carried out treatment to the letter. After two days the fever dropped to 99; patient made a slow recovery, was in bed over three weeks, and lost 75 pounds weight. After getting up he gained in flesh and strength but his temperature continues to rise each day. It is normal in the morning and rises to 99 or 100 through the day, drops to normal at 5 p. m., until next day. He has gained in flesh and strength, looks well, feels well, and as far as I can find is well, except the rise in temperature each day. Urine sp. gr. 1028, no sugar, no albumen, has never had any rigors, no malaria, has hemorrhoids since being sick, brought on by medicine; they are internal, bleeding. What is the cause of the rise of temperature each day and treatment of same?

Case No. 2. **ECZEMA.** Lady, 20, eczema since four years old, otherwise healthy; spots come out on hands and face, red at first and gradually fade, and

scale off like dandruff. Does not itch. It is also in her hair. I am giving arsenic sulphide, gr. 1-67, increasing gradually until effect; also hydrastin, gr. 1-67, two granules before meals. Locally I am using red oxide of mercury ointment, 10 grains to the ounce, with 1-2 dram of ichthyol and pine tar added.

W. M., Ohio.

The rise of temperature in the doctor's case is probably autotoxemic. It is clearly a case for the use of Saline Laxative and the W-A Intestinal Antiseptic tablets, adding berberine, gr. 1-6, four times a day, to contract the spleen and other tissues somewhat. Probably it would be wise for the doctor to go away for a few weeks, as there may be some local conditions about his home which keep up the fever. By all means make a thorough sanitary expert examination of the premises.

For the lady with chronic eczema I would advise arsenic sulphide, seven granules a day, as you are giving. In fact, I do not see well how your present treatment can be improved upon, only stick to it. But you must keep her bowels clean and clear, as there may be absorption, thence autotoxemia and consequent irritation of the skin. You had better inquire also into the menstrual function and see that it is normal. Apply Resinol to the eczematous surface.—ED.

Query 1418:—POST-TYPHOID. Widow, 33, typhoid in '94, lasted seven weeks, soon after fever became much heavier than before but did not regain strength. Three years ago tender spots came on legs and have remained till now. Ankles and feet are swollen at night and painful most of time; spots are slightly red and often their place is occupied by a pone-like swelling; kidneys irregular but urine normal when analyzed, constipated.

T. O. A., Ky.

Stimulate the circulation and elimination by apocynin, one to three granules every three hours; restore the blood by

full doses of Nuclein (Aulde) and the tonic arsenates; keep her bowels clean and clear; make the hygiene of her home perfect, and nourish her to the utmost. Sanguiferrin, a teaspoonful every two hours, should be useful in such a case.—ED.

Query 1419:—DEPILATORY. Is there any depilatory other than electricity for lanugo hairs that is safe and permanent?

M. M., N. Y.

No. There is no known agent that will destroy the hair bulb and leave the skin uninjured unless you can transplant a colony of microbes from a bald head.

I have just received a sample of "Solviod," a liquid depilatory put out by the Oriental Chemical Co., Washington, D. C., which is claimed to remove hair without affecting the skin, but I notice there is no claim that the hairs cease to grow.—ED.

Query 1420:—HEPATITIS. Male, 32, pain in liver, right shoulder and under right scapula. Had hyperemia of liver five years ago and trouble with same ever since, worse after hard day's work, liver enlarged at times, constipation, no jaundice, appetite good, never bilious, works nearly every day, is also rheumatic.

VESICAL TENESMUS. Lady, 69, intense pain at neck of bladder, micturates eight times an hour, spasms occurring two or three times during the day; neighbors half a mile away can hear her screaming with pain. Is her husband's second wife and during his period of single blessedness he contracted the gonorrhea, but claims he was entirely cured before his second marriage. The woman's urine is normal in amount and color, no mucus, no blood, slightly acid, genital organs in normal position, urethra normal. The first time I passed sound it pained so much I had to desist, but when I drew her attention to something else I passed it without trouble. No history of stone in kidney and could discover nothing with sound.

THE ALKALOIDAL CLINIC.

GOITER. How would the internal administration of calcium iodide answer for enlarged thyroid?

S. H. E., Pa.

1. Apply over his liver a mixture of ammonium chloride and strong nitromuriatic acid, 1-2 ounce each, and water 2 ounces, and give also 20 drops internally thrice daily.

2. Give hyoscynamine amorphous one granule, lithium benzoate two, and gel-semin one, every one to three hours to effect. Examine the urine for gonococci.

3. Try the calcium iodide, and let us hear results.—ED.

Query 1421:—PILOCARPINE. What physiological good do you get from the sweating caused by pilocarpine?

E. H., Md.

Pilocarpine strongly stimulates the salivary secretion, and sometimes this strong stimulation enables the tissues of the mouth to set up a curative action, just as the use of sanguinarine does in other cases. The explanation of the action is difficult, nor is it uniform. The sweating caused by pilocarpine is of use as eliminative and whenever there is locking up of the perspiration. It is also an index of an effect upon such diseases as erysipelas, not at all understood, but not less true.—ED.

Query 1422:—CHILLS. I have a young lady patient with following symptoms: Age 19, delicate, chills at or just prior to menstrual flow followed by fever. Comparatively well at other times, bowels regular. I think her blood is poor and that she needs something like nuclein and iron arsenate, as quinine and chill tonics have no effect.

W. L. S., La.

You have no doubt hit the nail on the head. The girl has not sufficient vitality to menstruate properly without the physiological disturbance you speak of. Your suggestion is first-class. Give her nu-

klein, either five drops three times a day between meals, or twenty drops hypodermically twice a week. Give her also three granules of strychnine arsenate, gr. 1-134, before meals, along with three granules of quassin, gr. 1-67; and after meals give her a tablespoonful of Sanguiferrin in a glass of milk. The Sanguiferrin you can obtain through your pharmacist, or have your patient send \$1.25 for a bottle by prepaid express to the Sanguiferrin Phar. Co., St. Louis, Mo.—ED.

Query 1423:—SCARLATINA. Girl, 13, well-defined scarlet fever, temperature high, pulse correspondingly rapid, throat bad and nose much involved, breathing through mouth a necessity, discharge from the nose purulent and fetid. Doctor called and prescribed as follows: Phenacetin, 2 drams; elix. digitalis comp., 3 oz. Direct: Teaspoonful in water every four hours.

Acid boric, 1 dram; potassium chlorate 2 drams; Listerine, 3 drams; glycerin, to make 4 oz. Direct: Teaspoonful in as much water to be used as a gargle every two hours.

The external use of ice to head and throat interdicted, syringing nostrils forbidden. Sweet oil ordered as lubricant of body. This constituted the sum total of the treatment, except a mixture for restlessness or nervous manifestations, which the child could not and did not take.

Now I wish your opinion and criticism of the above treatment of scarlet fever. And will you kindly outline the newer and better way—give the alkaloidal treatment?

Is the application of ice (external) to the throat contra-indicated? If so, why?

How long after convalescence sets in until all danger of contagion is past?

Can anything be done, outside of the usual precautions, to prevent infection, or to modify the course of disease?

What process of disinfection should the room and bedding be subjected to before being reoccupied as a sleeping apartment? By complying with the above requests you will confer a favor upon an admirer and subscriber.

J. L. S., Va.

The first formula is a curious specimen of the old way of treating fever. We would now give the Triad or Defervescents, in "dose enough," with Nuclein (Aulde) to maintain vitality and reinforce the leucocytes, calcium sulphide to combat the infective principle, and such other agents as the symptoms required. Locally, we would wash out the nose very often with Hydrozone, every quarter hour by day and half hourly by night, keep ice to the neck and give ice cream liberally, to check the diphtheritic process.

Contagion ceases when the skin has peeled off the first time, but may cling to clothing for years. Infection cannot be prevented except by isolation. The course of an attack is favorably modified by putting the premises in the best hygienic condition. Thorough fumigation by sulphur or formaldehyde, burning useless things, soaking clothes in calcium chloride solution, are the best disinfectants.—ED.

Query 1424: — TUBERCULOSIS. A mother, 33, aborted while married to first husband, by the second had a fine boy, who when a few months old, began to fail and died at eight months from tubercular meningitis. The mother is well-built, with a tuberculous history. If she has another child will it be like the last one?

J. C. S., N. Dak.

Frankly, I do not know. The child could hardly inherit tuberculosis if she has it not. When the next baby is born she had better begin rubbing it daily with hot cod-liver oil, with something like Searle & Hereth's Hemonervine internally, and it should be all right. Is there a possibility of a specific taint from her first husband?—ED.

Query 1425: — HIVES. Please give alkaloidal treatment for large white wheals on limbs and back; they come and go, are

worse at monthly periods, itching and burning.

A. B. S., Okla.

Rub those hives with Chiolin when they appear. In the intervals give a trial to almuin, one granule before and after each meal and at bedtime. During the periods give Buckley's Uterine Tonic, one tablet three times a day. At all times keep the bowels empty and aseptic.—ED.

Query 1426: — STRICTURE. Will any medicine cure organic urethral stricture? I enclose a formula which is advertised as a cure, destroying the diseased tissue without affecting the sound.

How can quinine best be used hypodermically?

W. H. G., Ga.

I haven't the least idea whether the preparation you name would be of any use or not, but have a very strong conviction that it is not of any value. I have recently cured a case of organic stricture by injecting europhen-aristol with petrolatum once a day for a month. I do not know whether it will cure every case or not. The experience is given to you for what it is worth. It does no harm, is not expensive, and I shall certainly try it in every case that presents itself to me.

With a hard cartilaginous stricture I do not believe it would be of any use at all, but would urge dilatation; best by inserting a full size soft bougie and leaving it in position over night. Next night you can insert one two sizes larger, and so on each night until the stricture is fully dilated.

If you are an expert, however, and have the apparatus, you can use Robert Newman's electrical method with good advantage. In either case the bougie should be passed once a week thereafter, to prevent closing up again. As to the hypodermic use of quinine, I will publish your request and let the brethren give their experience. A compound of mercury and nuclein has recently been intro-

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duced by Parke, Davis & Co., known as Mercurol. It would be well to try this locally, as a means of promoting absorption of the morbid deposits.—ED.

Query 1427:—ASTHMA. I would like suggestions on the treatment of bronchial asthma, lady, 40, ailing 19 years.

W. R. B., Ark.

You should have no special difficulty in managing that case of asthma, if you have read the articles appearing upon its treatment in the CLINICS of the last few years. Treat the paroxysm by applying mustard over the pneumogastric nerve in the neck on the right side, giving internally one granule glonoin, one of hyoscynamine, repeated every ten minutes until effect. In the intervals give strychnine arsenate gr. 1-30, three times a day, adding one dose every two days until you have the full effect of the strychnine. Sometimes in asthma we find nasal hypertrophies, or hyperesthesia, when an application of Camphoral may give speedy relief. Try it, anyway.—ED.

Query 1428:—PARALYSIS. Two years ago my patient was struck by a falling tree over the kidneys; both legs are completely paralyzed, although for four months he can feel when pinched, bowels uncontrolled, bladder, also. His appetite is good and he has no pain. Can anything be done for him?

J. N. A., Wis.

You might give this patient avenin, from three to seven granules a day and twice a week give a hypodermic of strychnine hypophos., 1-12 of a grain, increasing if no effect is manifested. Sometimes these huge doses waken the sensibility when smaller ones would do no good. If some nerves are inhibited by pressure of inflammatory exudates, would not a course of some powerful absorbent-stimulant like Mercauro, in full doses, be worth trying. If you give it at all let it be for at least a month.—ED.

Query 1429:—OLIGURIA. I send urine for examination with \$2. The quantity passed in twenty-four hours is twelve ounces. The patient is my wife, age 47, rheumatic, fleshy, but otherwise in good health until six months past.

J. M., Texas.

You will note in the examination of the urine the very high specific gravity, the presence of bile, and of oxalate crystals. My advice is that you give her apocynin, one to three granules every two hours while awake; also dilute nitric acid, 10 drops before each meal. Keep her bowels regular and aseptic, using Saline Laxative and the Intestinal Antiseptic tablets for this purpose. The presence of bile is somewhat exceptional. Has she had anything like gallstone colic or any indication of soreness in the neighborhood of the gall bladder? If so, I would put her upon sodium succinate, five grains four times a day, and continue it six months or a year. Urotropin is the remedy for phosphaturia. There is a new preparation known as Dialith, which ought to be useful in increasing the flow of urine. If you try it, let us know the result. Volatile oils stimulate in small doses but are dangerous in larger.—ED.

Query 1430:—EPILEPSY. A boy two and one-half years old had dysentery last summer and on recovery began having spasms in the early morning once a month. In December he had several. In January he had influenza followed by cystitis and hematuria. He was circumcised with no benefit. The spasms have grown worse. After a spasm he looks dull, the head droops, eyes dull, and has little use of his limbs, then he gets brighter and more active, showing great and unnatural energy until an explosion comes in a spasm. The pulse was 150, respiration 45, but have fallen under treatment.

J. W. W., Texas.

The case is not a clear one, but I would see if there is a possibility of stone in the bladder, which would account for the

hemorrhage. Put the child on the vegetable diet and keep the bowels regular with colchicine, giving also cicutine and hyoscine hydrobromates in doses suited to his age, pushing them up to full effect. I would not give bromides in any shape.—ED.

Query 1431: — HEMORRHAGE. My fourteen-year-old daughter has attacks of bleeding from the nose and mouth, once from the eyes. She once had purpura but not now. She bleeds less frequently than two years ago, is bleeding at the gums now. She has grown well during the last year. I have tried many things locally and internally and would like help.

G. F. P., Ohio.

First see that menstruation is regular and if not let her have medicine for it at the proper time. Keep her bowels regular with Saline Laxative and give her continuously calcium lactophosphate, a granule every hour while awake. When bleeding occurs apply a two per cent solution of cocaine to it and give hamamelin internally, a granule every fifteen minutes until relief occurs. I judge you will find that this meets the necessities of the case perfectly. See that the digestion is normal, and if aid be needed I would advise Maltine with hypophosphites, as well suited to this case.—ED.

Query 1432: — GASTRITIS. Many patients present the following symptoms: bad breath, tongue broad, heavily coated, dirty white, bad taste in morning, sore-throat, languid, headache at intervals, when all the symptoms are worse. Appetite variable.

What do you advise for frequent urination, lasting a few days only?

The case of suppuration in the testicle healed but broke out again, leaving a hard lump as large as a walnut, partially hollow. What shall I do with it?

O. F. W., Ind.

The symptoms you describe are those of gastric catarrh. I would suggest in all these cases the use of vegetable diet

with abundance of exercise and three or four granules of colchicine daily. These I believe, with the local treatment you are giving, will answer admirably. The mistake is generally made in treating these cases of giving medicines to increase the appetite. There is a remedy called Auto-Toxide, recently introduced, that should be of value here. Try it and report.

In cases of frequent urination I would recommend acid benzoic, a granule every half hour until relieved adding hyoscyamine amorphous, one granule at each dose, until the mouth begins to feel dry. Cystogen is said to be effective in these cases.

If it is possible for you to bandage the scrotum so as to bring the walls of the abscess together I would do so. The best way is to draw over it a little rubber bag like a toy balloon, or else bandage with a rubber bandage. If you cannot do this, you will have to open freely and pack with iodoform gauze. Sanitas Disinfecting Fluid is made by the Sanitas Chem. Co., New York City. It is an excellent remedy for abscess cavities.—ED.

Query 1433: — ANGINA? Man, 40, for some years suffers at intervals, pain two inches to the left of the ensiform cartilage, coming after midday and lasting until he goes to bed. He is worse in winter and when the weather changes. He is sometimes free for months, appetite good, sleeps well, in fact eating sometimes gives relief. The pain is no worse than formerly but comes more frequently. Two years ago he had a true angina and another attack in May, each lasting three hours. He chews tobacco to excess.

W. A. F., Minn.

The pain may be due to a gallstone or to some organic disease of the heart. If it be the latter, give him arsenic iodide three granules a day, increasing by one dose every three days until you get the full arsenic effect, itching of the eyelids, etc. Treat the paroxysms by one gran-

ule each of glonoin, hyoscyamine and strychnine arsenate, given together every fifteen minutes until you get dryness of the mouth. Keep his bowels regular with Waugh's Anticonstipation granules. See that he does not overeat. You had better examine his heart and the great arteries very carefully. Sometimes a little aneurism is hidden away in the thorax to cause these troubles. A very good addition to this would be Melachol, in half dram doses an hour before each meal, to stimulate absorption and metabolism.—ED.

Query 1434:—BROMIDROSIS. Please give treatment for fetid sweating feet. Also for gallstones.

W. E. A., N. J.

Forbid your patient drinking iced drinks, have him do with as little liquid as possible. Let him powder his stockings with Campho-Phenique powder. The feet should be washed every day and the soles scraped. The man should wear cloth shoes to allow free ventilation.

You are doing exactly the right thing for the case of gallstone, only you must keep up the sodium succinate for six months or a year, and be satisfied if you find the attacks growing less severe and less frequent. It might help a little if you apply mustard over the right pneumogastric nerve during the attacks, giving glonoin, hyoscyamine and strychnine arsenate internally.—ED.

Query 1435:—SALIVARY DIFFICULTY. I send saliva with \$2.00 for examination. Patient, 60, has been ailing eight months. The saliva contains many small crystals, which cause much irritation and discomfort. History of repeated rheumatism and severe headaches. Thinking elimination was needed I gave salines, lithium citrate and W-A Intestinal Antiseptics with slight improvement.

F. J. F., La.

The laboratory reports the presence of numerous influenza bacilli with pus cells

and diplococci in the saliva. You had better use an antiseptic mouth-wash, such as Listerine, half a teaspoonful in a tablespoonful of water, rinsing the mouth out thoroughly therewith. Repeat this five or six times a day. Slip a few tablets of Eudoxine into the vest-pocket and tell the patient to let one dissolve in the mouth every two hours.

Internally give pilocarpine, one granule, every fifteen minutes until slight salivation or sweating begins. This ought to favorably modify the affection. If it does so, leave the patient on nuclein and tonic arsenates.—ED.

Query 1436:—GASTRIC ATONY. Please give your treatment, medicinal and dietetic, for atony and dilatation of the stomach.

W. H. M., Pa.

I would recommend a diet of hot milk exclusively, from one-half to one glass taken every four hours, each dose preceded one-half hour by 1-6 grain granule of berberine. If catarrh is present berberine should be taken with a half glass of hot water containing 20 grains sodium carbonate. In this case a dose of Caroid should be taken with each glass of milk. Subsequently the diet should proceed on the principle of rich nutrition with the artificial digestion and the smallest bulk until the stomach has time to contract. There are several highly concentrated foods advertised in our pages, and I would try them, giving that which best agrees, or alternating them. I refer to Trophonine, Somatose, Milkine, Tropon and Plasmon. As offering great nutritive value in small bulk, these are exactly suited to such cases.—ED.

Query 1437:—EPSOM HYPODERMICALLY. Please give the uses and effects of magnesium sulphate when used hypodermically.

C. W. B., La.

We leave this to be answered by the man who has so employed it.—ED.

Query 1438:—NIEMEYER'S PILLS. In Waugh's "Treatment of the Sick" in the article on phthisis the amount of digitalin in a Niemeyer's pill is given as one grain. Is not that an excessive dose? How can we use piperazin in the fever of phthisis? It is so hygroscopic.

E. G. R., Vt.

The Niemeyer's pill contains one grain of digitalis, not digitalin, and if digitalin were so stated it would have been a misprint.

Please note the very important article on digitalis by Dr. Beates in our May issue. Dr. Beates is one of the boldest and most successful therapeutists in this country, and anything coming from his pen is of unusual value. I have been trying for over a year to obtain that article from him and consider it one of the most valuable ever printed in the CLINIC. Piperazin I usually give in the fever of phthisis in doses of 2 1-2 to 5 grains, in capsule, with an equal quantity of guaiacol.—ED.

Query 1439:—PYURIA. I send urine for examination with \$2.00. A father, 28, passes five and one-half pints in twenty-four hours, involuntarily at night, otherwise healthy, but short of breath and has a weak heart.

R. D., S. C.

There is a large amount of albumen present in the urine, with pus cells showing suppuration along the urinary tract. Put the patient upon salol, five grains, four times a day. If possible restrict him to the skimmed-milk diet as laid down by Mitchell, which you will find given in detail in Waugh's "Treatment of the Sick." If the salol disagrees or darkens the urine substitute lithium benzoate, two granules every hour while awake, with Urotropin, 30 grains, between supper and bedtime.

I shall be glad to hear further from

this case. I would consider it one of desquamative nephritis with a fair chance of curing.—ED.

Query 1440:—PHTHISIS. I send sputa for examination with \$2.00. It is from a young lady who has persistent cough.

L. L. M., Ill.

This is a case of mixed infection, the examination showing the presence of the bacillus tuberculosis, diplococci, pneumococci and many pus cells, a very common condition after la grippe.

Reconstructive treatment is indicated, along with which should be hypodermics of nuclein, two or three times a week, and the daily use of Sanguiferrin with strychnine as a nerve tonic and codeine in very small doses, with calcium sulphide or iodoform granules for the cough. Suppose you try Dr. Leininger's formaldehyde apparatus. It costs but a trifle.—ED.

Query 1441:—PAIN IN KNEE. Man, 45, working hard, rheumatic for 20 years, has pain in the popliteal space for six months, tenderness but no swelling nor stiffness, better while working, prevents sleep till after midnight, burning and itching in the thigh and below the knee.

O. W. H., Ill.

Put your patient upon a vegetable diet; give him one granule of colchicine and two of lithium benzoate, every two or three hours, and put a cold pack on the knee every night at bedtime. Or you might envelop the knee in a coat of Antiphlogistine, which has been highly recommended by Dr. McArthur.—ED.

Query 1442:—CANCER. A woman, 49, just passed over the change, has pain in the back, left side and thigh. The uterus is indurated, the neck obliterated, surface raw; there is no odor and not much discharge. She is thin and cachectic.

F. L. C., Ill.

The case may be of epithelioma, but possibly it is not. Apply Glyco-Thymo-

line tampons to the uterus, changing every night and morning for two weeks. Then apply europhen-aristol with petrolatum. Give her one B. U. T. four times a day. Keep her bowels clear and clean. If she improves on this after two or three weeks add arsenic iodide, six granules a day. Keep up the treatment as long as the induration lasts. Put her on Waterbury's Tasteless Cod-liver Oil.—ED.

Query 1443:—PITYRIASIS VERSICOLOR. A young man has large spots on the hands, arms, body and thighs, brown, worse in winter, it has lasted five years; there is no itching or irritation, he is otherwise healthy.

W. G. N., Iowa.

I judge that the spots are pityriasis versicolor. Apply pure Glycozone to them every night for a week, following with sodium hyposulphite, one dram to four ounces applied night and morning. Keep his bowels regular and aseptic. Derma Cream cures chloasma; suppose you try it on this case.—ED.

Query 1444:—TUMOR. At the upper inner part of my left upper eyelid is a growth, slightly raised, reddish, round, a quarter inch in diameter, first noticed a year ago as a little scaly roughness, growing faster of late, with a burning or itching sensation. I am 53, in good health, but this little visitor looks malignant. Does Oleson's book on Secret Nos-trums give directions for preparing cancer pastes? What shall I do with this cancer?

J. T., Iowa.

I do not believe the tumor is a cancer. More likely it is a cyst and the best thing would be to remove it by opening, which could easily be done.

The book you mention contains formulas for cancer paste. It is well worth its cost. Do not think of applying anything of the sort to the eyelid, because you cannot control the action and may

lose your eye. At the best, they would leave an ugly scar.—ED.

Query 1445:—CANCER. A man, 80, ten years ago had a cancer removed from the face. Five years ago nervous trouble started in the face, his false teeth hurt the gums. I applied creosote to the tender gums, which stopped the pain for a few days, when it returned. Eight weeks ago nothing but a hypo of morphine would relieve it, when the pain located in the left eye, he could neither eat nor drink without great pain. When he goes to eat anything tasty the pain will strike him so severely that he will scream.

J. H. S., Ark.

You cannot expect much from such a case at the age of 80. Keep his bowels regular and aseptic. Let him remove his tooth plate every night and put it in a cup of water with a teaspoonful of Borated Cassia, and clean the plate thoroughly by scrubbing it with a stiff brush, using sulphur for this purpose and as a tooth powder. Many persons do not keep the plates clean and this causes the soreness in the mouth. For the latter, I think you would find the application of tincture of capsicum of considerable value. In men of his age beware of the use of caustics. Generally the tissues need a stimulant.—ED.

Query 1446:—PARALYSIS. A girl 14 months old, born with thumbs tightly clasped in her hands, when placed on the feet, her left one goes out quickly but the right one drags. She cannot rise. When some weeks old she began using the left side, which improves, but the right is still helpless. Constipated.

A mother, 33, has varicose veins since her first child.

G. J., Cal.

The case is poliomyelitis anterior acuta. You had better have the paralyzed parts rubbed with hot cod-liver oil every day, the joints thoroughly worked. Give the child twice a week a hypodermic of strychnine hypophosphite, the full dose

for the age. Internally give one granule of avenin every day in divided doses. Keep the bowels regular by glycerin enemas, half a teaspoonful of glycerin thrown into the bowel once a day. Keep up the nutrition. Reinforce the regular diet with Armour's Soluble Beef, and McArthur's Syrup, in frequent small doses.

In the woman's case give hamamelin, one granule before and after each meal and at bedtime. Support the varicose veins by an elastic belt and stocking, wherever they are. I have had many of these from Flavell, and not one bad one. Have her use as little liquids as possible and keep the bowels regular. Continue at least three months.—ED.

Query 1447:—AMENORRHEA. A wife, 34, has severe pain back of left eye, every monthly period, the flow is scanty and pale, and is followed by the pain, she is fat and fairly strong, has suffered for many years, has bearing-down feelings before and during the flow. She was free from the pain while carrying and nursing a child.

J. S. M., Wash.

Use sanguinarine during the intervals between menstruation, giving her two to four granules three times a day. If she is at all anemic add iron arsenate, gr. 1-67, three granules to each dose. During the menstrual period let her take B. U. T., a tablet every two to four hours until the period for pain has gone by. If this does not give relief during the first period, when the next one comes give alnuin, six granules every two hours, while the pain lasts, but keep up the sanguinarine in the intervals throughout. In a somewhat similar case I got fine results from Freiligh's Tonic, though I never heard of its being given for such a purpose.—ED.

Query 1448:—HEPATIC ABSCESS. A Swede, 35, has had abscess of the liver

for two years; at three weeks' intervals the side swells, he is quite sick and vomits yellow pus for some days, when he is relieved. He will not submit to operation.

J. R. N., Texas.

As long as the man will not let you treat him surgically you will have to give him calcium sulphide in full doses to saturation and keep it up for some weeks, endeavoring to restore his nutrition by full doses of nuclein and the tonic arsenates, with Sanguiferrin, a tablespoonful four times a day. Give this and stick to it, and I think you will get the results you want.—ED.

Query 1449:—NEURITIS. A man, 35, weighs 220, had typhoid fever, after which his leg began to pain him and feel numb in one spot only, four inches above the knee. This has lasted two years.

J. A. C., Kans.

There is either an inflammation of the nerve or the veins, probably the former. My advice is that you rub the affected nerve with mercurial ointment once a day and give mercury biniodide, one granule, before and after each meal and at bedtime. Keep up his nerve-nutrition by a course of Fellows' hypophosphites.—ED.

Query 1450:—METRORRHAGIA. Uterine hemorrhage following miscarriage. Do you recommend europhen-aristol with petrolatum for such cases? If so, send me a supply. I notice in patients convalescing from fevers a subnormal temperature in the morning with a slight excess in the evening. What is the cause?

J. R. H., D. C.

I hardly think europhen-aristol with petrolatum would reach this case. Better use the curette, condense the uterine tissues with hydrastinine in full doses and meet any large hemorrhages by full doses of atropine. Glyco-Thymoline on cotton

tampons will be found soothing, antiseptic and hygroscopic.

In the cases you mention I would consider the low temperature in the morning due to defective metabolism, while the feeble condition of the heat-center is shown by the work and worry of the day having an undue effect. You may say that rest during the night also has an undue effect in lowering the heat in the same manner; so that both rest and exercise act unduly on the heat-center.—ED.

Query 1451:—PRURITUS RECTI. I have terrible itching of the rectum, almost unendurable, not constipated but pass a great deal of mucus at stools, which gives some relief. The trouble seems two inches up the rectum. Six months ago I had a small external hemorrhoid but it has disappeared. Some times a movement causes burning like hot lead. I used to smoke to excess but do not now, although I chew a little.

J. R. C., Ga.

The primary cause is the abnormal condition of the intestinal contents, for which I would recommend the neutralizing cordial. Take also a small morning dose of Saline Laxative to deplete the congested tissues and to give direct relief to the itching use a little Camphoral, which I have found effective in a somewhat similar case.

It might be well to deplete the congested rectal tissues by a small enema of water saturated with epsom salts or common table salt, or if this is too irritating inject an ounce of pure water-free glycerin.—ED.

Query 1452:—TUBERCULOSIS. I send you \$2.00 with sputa for examination. The patient age 20, has coughed since last fall, worse in the morning, chills and night-sweats for two months. I have given tonics without benefit, have added nuclein for two weeks with decided improvement. It is my daughter. She has studied very hard in a university and is still attending school. She is very am-

bitious, or I would have taken her out of school. Menses regular, appetite good since taking nuclein, bowels regulated by two or three Waugh's Anticonstipation granules at meals, with a teaspoonful of Abbott's Saline Laxative in the mornings. Since childhood she has had slight enlargement of the cervical glands.

C. M. T., Ill.

The sputa contains numerous tubercle bacilli, diplococci and pus cells.

The report of the laboratory tells its own story. Turn to the August CLINIC of 1899, and apply the treatment there recommended in its entirety. Keep the girl at home during the summer and when it gets cool send her to Phoenix, Ariz.—ED.

Query 1453:—CATARACT. Has any medicine been advised for the absorption of cataract? If so, what success has it obtained?

D. M., Ohio.

It is said that soft cataracts have been absorbed by the use of remedies which contain iodine and daily mild massage of the eyeball, rubbing the ball gently for five minutes at a time once a day. While various plants have been used for this purpose, they all contain iodine and may be represented by granules of iodoform, one every waking hour. How would it do to massage with an electrode connected with the negative pole of a static machine? Write to Prof. Neiswanger, Illinois School of Electro-Therapeutics, and ask him.—ED.

Query 1454:—COLD ABSCESS. Ten years ago at 18 I had a cold abscess just below the right greater trochanter. It was opened, a sinus remained, closing in a few months. Two years later the scar broke down, and this was repeated three years later. Now I am having my fourth attack. I am otherwise in good health, six feet three inches high, my weight has increased during five years to 215 pounds.

The pus does not contain tubercle bacilli.

C. A. W., Conn.

After opening the abscess and emptying it as much as possible my advice is to inject it with Sanitas Disinfecting Oil, which you can obtain from the Sanitas Chemical Co., New York City. My reason for recommending the oil is this: It is antiseptic, being charged with peroxide, and it stimulates a healthy action. I have used it with considerable satisfaction. It is not a caustic. If Vitogen acts as well as is claimed in treating burns, would it not answer also in a cavity?

If the abscess cavity is so situated that there would be no danger in the use of a caustic, and is not very large, I would try an injection of Villate's solution, in case two-weeks' treatment with the Sanitas oil failed to produce a reasonable cure.

In regard to the internal treatment, let me speak warmly of the use of nuclein, in full doses, with the tonic arsenates and calcium salts; the sulphide when pus is forming, the sulphocarbolate when the bowels need disinfecting, and the lactophosphate as a tissue builder; either of the three to be taken to the full verge of toleration.—ED.

Query 1455:—HAY FEVER. Please give treatment for hay fever, and for aphonia of two weeks' duration in a girl 16 years old. Are funis clamps generally approved by the profession and are they infallible? What will cure bad breath due to chronic nasal catarrh? What electrical battery would be most serviceable in ordinary practice?

P. S. G., Mass.

(1) For hay fever, appropriate treatment for any local trouble found in the nostrils; strychnine to full toleration for the attacks; hydrastinine gr. 1-12, three times a day afterwards, to prevent recurrence.

(2) For the aphonia, calcium iodized, one grain every hour while awake with a cold compress to the neck.

(3) Funis clamps are not used near as much as they should be. They are as near infallible as is possible in the nature of things.

(4) Wash out the nostrils with warm salt water, containing a tablespoonful of distillate hamamelis to the pint. Then spray with europhen-aristol with petrolatum from an oil atomizer. Do this three times a day. The Norwich Pharmacal Co. makes a useful wafer for this purpose, which has been warmly recommended.

(5) Were I limited to one battery it would certainly be a static. There is little that can be done with electricity which this will not meet. There is no fluid to be spilled and it does not get out of order. You can leave it standing for months and find it ready for use. I have found the chloride of silver batteries about the ideals for galvanic currents.—ED.

Query 1456:—RIGHT SHOULDER PAIN. Man, 52, belching of gas for some years with palpitation and an acute burning sensation in the right shoulder blade, below spine of scapula and along the vertebral border, disappears on pressure. The affected spot is larger than a silver dollar. He calls it as sore as a boil, has occasional numbness in the right arm, nothing is visible on inspection. The bowels and kidneys are all right.

A. T., Mo.

The diagnosis is doubtful. I have one very interesting case here with a similar pain in the right shoulder, due to ulceration somewhere about the right lung, but I have been unable to locate it. I would suggest that you apply a belladonna plaster over the painful area, or perhaps it would be still better to use an ointment of aconitine applied in the manner recommended by Murrell in the June CLINIC.

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Sometimes such a pain comes from an abscess or inflammation of the liver. If the liver is at all tender or enlarged you might apply a solution of nitromuriatic acid and ammonium chloride, each 1-2 ounce with two ounces of water. Let the man take 20 drops of this internally three times a day and paint the same over the liver as often. If you have a McIntosh static machine, apply your anodyne and then drive it in by means of the current.—ED.

Query 1457:—SCIATICA. The CLINIC is very interesting, amusing and instructive. Compared to other journals it is worth more than its price.

What would calcium sulphide dissolved in water taste like?

Would Betz Hot Air Apparatus do any good in sciatica, where everything else has failed?

To "clear the deck for action" was one of the first proceedings as taught by Prof. Lynch a dozen years ago. What more than that is your often-recommended Saline Laxative followed by the Intestinal Antiseptic? It is indeed the best all-round "deck-clearer" I know of. I hope it will not soon be advertised in the drug-stores and on fence and telegraph poles (alas for the race), on equal terms with patent and proprietary stuff. I look for it. It has almost reached that point now. A druggist told me recently he had treated three men with it and cured them with just one or two doses. I said nothing but thought—"damn."

W. S. M., Ohio.

We are much gratified that you are well enough pleased with the CLINIC to continue as a subscriber. Will reply to some of your queries.

Calcium sulphide dissolved in water would taste like rotten eggs, and very rotten ones at that. Saccharin or sugar covers best.

The Betz Hot Air Apparatus will do a heap of good in a case of sciatica if used thoroughly. Keep the alimentary canal clean and sweet (Saline and Intestinal

Antiseptic of course) and then use the bath thoroughly and repeatedly, with rest to limb and general elimination, and you will be pleased with the result.

I am glad to know that you like our preparations and while we cannot prevent druggists suggesting or prescribing them, we do not advertise to the laity.—ED.

Query 1458:—CATARRH. Can you or any of the CLINIC family give me any assistance? It's my own case.

I have been trying for more than a dozen years to find something that will cure my catarrh (I mean nasal catarrh), and have thus far fallen wide of the mark. I have repeatedly plead for aid through the different journals to which I have been a subscriber, and have feared all along that I would sooner or later have to abandon my profession on account of it, and now I am about "up against." I have suffered from nasal catarrh for about 18 years. Have tried everything that I had any idea would do me any good; and all the remedies that cured patients in my brother practitioners' hands. Still I am a sufferer from it. For fear some one will ask my symptoms, I would state that they embrace the entire group that go to make up a case of chronic nasal catarrh; (you all know what they are), except there is no disagreeable odor about it; and never has been. The greatest trouble is on awakening after a sound sleep; I can hardly get my eyes open until I get a cup of hot coffee. This I have brought to my bed each morning, as soon as I awake. I call for it by means of an electric bell connected with the culinary department. Now if any brother can aid me I assure you I will rightly appreciate it. Brother, what do you cure your chronic nasal catarrh patients with? Or did you ever cure one? Don't give me the climatic hobby, California, Colorado, etc. I've been all along that line already. Give me some practical common-sense cure that you know is a cure, i. e., if you do know of such a thing. I have been a member of the CLINIC family but a short time, but can truthfully say it's the most practical journal that visits my desk. I

am always anxious to see the CLINIC. Success to the journal and its able editorial staff.

R. A. B., Mo.

First, I would advise you to buy and read carefully Dr. Bacon's excellent monograph on Catarrh, published in the CLINIC and reproduced in pamphlet form at 25c. Next invest in a Birmingham douche with a supply of Glyco-Thymoline, a quart bottle of hamamelis, a bottle of europhen-aristol with petrolatum and a good oil atomizer. Now you can begin. As often as possible through the day use Glyco-Thymoline with the Birmingham douche. Before going to bed take a quart of warm water with a teaspoonful of salt in it, add a tablespoonful of the hamamelis and run it through your nose with a fountain syringe. Then atomize the europhen-aristol with petrolatum for a few minutes until the whole mucous membrane of the nose is covered with a layer of this substance. Keep this up for one month without missing a day before you consider the question of benefit or failure. If you are benefited at the end of that time continue it until cured, although you will probably have to use the cleansing process daily for the rest of your life.

In addition to this get rid of your uricemia by adopting the vegetarian regime. I would also say to stop coffee, but being addicted to the morning cup myself, I would rather have a reasonable amount of catarrh than give it up, consequently refrain.—ED.

Query 1459:—HEPATIC ABSCESS. Man, 30, ten years ago had an abscess of the liver, from which I aspirated a gallon of pus. He was reduced to a skeleton, but finally recovered. Two months ago he was taken ill, resp. hurried, pulse, 100, weak but wiry, no fever, heart sounds normal, liver and spleen normal, abscess in lower left lung, sputa containing blood and pus. The abscess has healed. The

stomach and bowels are distended with gas so as to press his heart and lungs. This causes smothering spells, worse when stomach is distended. I have been giving the W-A Intestinal Antiseptic, or what they claim to be the same in Visko-lein, which has helped him somewhat. Urine, sp. gr. 1012, no albumen, no sugar, neutral; eyelids slightly puffed, feet and ankles edematous, swelling gradually extending upwards.

J. M., Mo.

Yours is a very interesting case and I must compliment you on the way you have managed it. Whatever is the cause of the obstruction I believe that you will do best by keeping his bowel regular with Anticonstipation granules, as these will also check the tendency to gas formation and stimulate the heart. Add to these a volatile oil such as the oil of cinnamon, or better yet, Sanitas disinfecting oil, if you can get it, giving of either five drops four times a day.

Then as to his heart: I would give berberine here, 1-6 gr. four times a day, for its contractile effect upon the relaxed tissues.

Is the abscess an empyema? It looks so to me. Add to this, nuclein in full doses to stimulate his vitality and follow with the tonic arsenates also in full doses. He should have plenty of building material, Hagee's Cordial and Sanguiferrin in full dosage.—ED.

Query 1460:—DIABETES. I send urine for examination with \$2.00. It responds to test for sugar and to Gerhardt's test for acetone. It was discovered by testing for life insurance. The man seems in good health, has some fermentation in the stomach and headache, takes a patent medicine called "Brain Food" for headache, has no symptoms of diabetes, the tongue is always brown. Please suggest treatment. He is 48 years old.

R. L. B., Ky.

The report of the laboratory shows sugar to be present. Note also the high specific gravity and the absence of ace-

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tone from this particular specimen. I should certainly not care to insure the case. I need not say anything as to the diet of a diabetic, but would suggest that you give a full trial to strontium lactate, giving 30 to 60 grains a day and testing once a week to note condition of the sugar excretion. I have had such good results from this that I would strongly urge a trial of it. I have also had some favorable reports on the use of Elixine, which would be well worth trying here.—ED.

Query 1461:—NEUROSIS. A man age 20, sawing wood, suddenly was forced to take a long breath two years ago, since when he must take these long breaths every few respirations while awake. There is some bloating after eating, is constipated, chews 10c. worth of tobacco a week, otherwise has good health. Sometimes the heart gets to beating fast and slow by spells.

C. A. A., Wis.

I believe this case is a neurosis, and would advise you to stop the tobacco altogether. Then keep his bowels clear and clean, and tone up the heart with Cardiac Tonic (cactus), beginning with three granules a day, and increasing to six if necessary. Subdue the irritability of the pneumogastric by giving a granule each of cicutine and hyoscine hydrobromates, three times a day, increasing to seven doses if necessary. You may find Seng well suited to this case.—ED.

Query 1462:—CHRONIC ENTERITIS. A mother, 25, had dysentery followed by indigestion, belching odorless gas, alternate diarrhea and constipation, with frequent dysenteric attacks for six years. Fullness and rumbling in the bowels, seldom has nausea but often vomits. At first the food was passed undigested but is now well digested. Menses irregular and scanty, she is quite weak, has free leucorrhea, retroflexion. To-day I ordered

Glycozone, a teaspoonful just after eating. She weighs about 90 pounds.

T. N. L., Fla.

There is evidently a chronic condition of inflammation in that woman's bowels. I would recommend in the first place that you put her on a diet consisting exclusively of hot milk, lean meat and fruit juices, raw or soft-cooked eggs, and rice, and the valuable concentrated nutriment, Tropon. Give her every morning a small dose of Saline Laxative with one W-A Intestinal Antiseptic tablet every two hours while awake to render the bowels aseptic. After ten days of this treatment add to it a capsule containing ten drops of commercial oil of turpentine three times a day. Use the commercial and an old oil if you can get it.

After her digestion has been quite restored she will need nuclein and the tonic arsenates to build her up and probably that lacerated os should be sewn up and the retroflexion corrected. I would use Glycozone when she has considerable distress in the stomach and then give fifteen drops every four hours in addition to the other remedies. If her bowels are constipated let her use an enema to relieve them, but I think the morning dose of Saline Laxative will be sufficient. There is a digestive elixir containing benzothymol made by Sharp & Dohme that should fit in here admirably.—ED.

Query 1463:—HEART DISEASE. A German, 70, has short breath, no appetite, ankles swollen, constipated, urine scanty with traces of albumen, heart dilated. He is a large fleshy man, indolent, cannot sleep, vomits. Apocynum causes vomiting.

J. C. F., Mich.

I judge that your patient has some degeneration of the heart-wall in addition to dilatation. You will have to treat him with very great care. I would recommend one or two granules of apocynin every two hours while awake, continuing

the quassia as at present. For the nausea give a granule of emetin every hour until better and keep his bowels regular with Saline Laxative.

I notice you say apocynum caused vomiting; try apocynin and see how much better it is. I would feel very dubious about giving him digitalin, strophanthin or strychnine, as these lager-beer hearts do not bear either of these agents very well. Let his diet be very nourishing, without much liquid. In fact, let him drink as little as you possibly can.—ED.

Query 1464:—PHTHISIS. What is the best preparation to asepticize the pulmonary tract in a case of pulmonary tuberculosis? Can you recommend a suitable oil atomizer for spraying the pulmonary tract? Please inform me on this at once, as I have a case of phthisis I am treating and am anxious to make a cure.

J. A. H., Ill.

I cannot answer your question definitely regarding the best antiseptic for the pulmonary tract. That depends largely upon conditions. Iodoform and calcium sulphide internally, both eliminating by the lungs, are helpful. I do not think anything inhaled does more than favor expectoration. For this purpose some of the bland oils carrying a little menthol or something of the kind is helpful. The fumes of vinegar inhaled are helpful. So also is the atomized eugenol-aristol with petrolatum. If you have the CLINIC for August, 1899, you have a good deal on this subject. We shall devote an issue this fall to tuberculosis.

The Eureka Nebulizer would be a good addition to your office. Camphelyptus is a new suggestion for this purpose that seems well worthy a trial.—ED.

Query 1465:—JAUNDICE. A man, 52, began with heaviness and pain in the stomach in January, dullness, skin dark yellow; in February began itching and

burning; in March the intense itching compelled constant rubbing, also pain in the kidneys, queer feelings at night, sometimes blind; in April symptoms more intense, melancholy, at times crying, at others singing, stools very light color. I took charge of the case April 28th; gave podophyllin, apocynum and sodium phosphate. Soon after this, began intense pain under the right arm, a tumor appeared in the axilla, developing rapidly until 22 inches in circumference at the base, elevated three and one-half inches, hard, smooth, color of the skin. The pain disappeared as the tumor appeared, the itching has abated considerably, but he still has smothering spells, during which he becomes wild and sometimes unconscious.

J. C., Mo.

The symptoms of your case at first were those of obstructive jaundice, and from the relief ensuing since I would infer that you are dealing with an abscess of the liver. If this be the case, however, the aspirator would show the tumor to contain pus, when it should be evacuated. Keep the bowels regular with Melachol. The itching will be relieved somewhat by pilocarpine. I am unable to say further until I know the result of the examination of the tumor.—ED.

Query 1466:—RAPID HEART. On page 397, May CLINIC, Dr. Miller speaks of a failing heart falling from 120 beats to 70 and vanishing. I have always supposed the failing heart became rapid rather than slower. Please explain.

F. E. L., Mass.

The question is up to Dr. Miller.—ED.

Query 1467:—ACCIDENT. Two ladies were thrown backwards from a wagon. Mrs. A. struck on her neck, causing severe pain, tenderness, right arm useless and hurting when not supported, followed by loss of sensation in the occipital region. Mrs. C. struck on the sacroiliac joint with symptoms of concussion, no loss of sphincter control. On trying to stand she felt as if the hips were being pushed up on each side of the spine. She

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now complains of paresis in the left leg. A suit has been started for damages. Can you give prognosis?

H. G., Minn.

In the case described it is absolutely impossible to form an opinion without the most careful of physical examinations. On the face of it it looks as if Mrs. A.'s spine had been injured in the cervical region and as if Mrs. C. had suffered concussion, which may have injured in some manner the nerves proceeding from the lower portion of the spinal cord.

Personally, I would not go into court as a witness in such a case unless fortified by an X-ray examination made by an expert like W. C. Fuchs.

But, my dear Doctor, you say suit for damages has been entered, and this renders the question excessively difficult, since women are not apt to underrate their sufferings, and you cannot see a pain, nor can you tell whether the limbs are useless as they say, unless you examine under ether and with the electric battery. Even so, the electric examination should be by an expert; as I have seen a professor of Jefferson Medical College tied up in a hard knot, on attempting to explain an examination made by him under such circumstances.

Were it a question of treatment simply, I would advise counter-irritation over the affected regions by the application either of lunar caustic or cloths wrung out of very hot water, and applied over the affected regions, with properly adjusted body braces, such as made by Dr. Wolfertz, or the firm at Salina, Kansas.—ED.

Query 1468:—OVARALGIA. A young lady, very anemic, has pain in the left ovary. How can I cure her?

W. D., S. C.

Keep the bowels regular and aseptic in the usual manner, and give the young lady one of Buckley's Uterine Tonic tablets every two hours while the pain lasts. Perhaps you may succeed in diagnosing

the case by an examination through the rectum. Until this is done I would not advise any local treatment.—ED.

Query 1469:—TONSILLITIS. A child four months old has congenital enlargement of the tonsils; will nuclein be of benefit?

G. F., Tenn.

Give your patient with congenital hypertrophy of the tonsils one tablet of iodide of lime to dissolve on the tongue four times a day, and either a tablet of nuclein or two drops of the solution on the tongue also four times daily. Do not give them both at the same time. Keep the patient's bowels well open. Restrict the diet to fruits and vegetables. If the hypertrophy is not fibrous in character good results will follow. If it is, enucleation is the only thing. Protonuclein special applied daily in powder, has proved of benefit in this malady.—ED.

Query 1470:—MORPHINE HABIT. A man, 40, took morphine for seven years, then changed to opium, eighteen months ago was taking 100 grains a day, his mind began to fail rapidly. I have stopped the drug but his mind grew worse. He was sent to the asylum, but did not improve until a month ago when he returned home, since then he has improved rapidly, but his mind at times seems to leave him. He works, sleeps well, bowels and kidneys regular, appetite irregular. What is your prognosis and treatment?

J. J., Ark.

Give him zinc phosphide, gr. 1-6, three times a day for a week and then substitute strychnine arsenate, gr. 1-30, three times a day, adding a dose every two days till you reach the limit of toleration. You may have to give very large doses.

The object of these remedies is to aid the nutrition of the nerve centers and arouse them to healthy action. Keep the bowels clear and clean. Do not let his liver get clogged. Chionia is said to be an effective agent in keeping it active.—ED.

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In his paper read at the recent meeting of the Mississippi Valley Medical Association, Doctor L. H. Warner, Brooklyn, N. Y., says—

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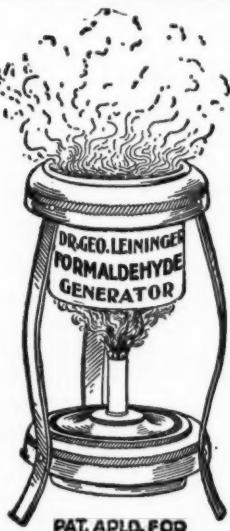
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results not only negative but positively injurious. He suffered the agonies of the damned with a train of nervous symptoms almost unbearable.

Frequent and large doses of Peacock's bromides with applications of Antithermoline not only relieved him but he is practically well.

I am now using it on our County Surveyor; he was operated on three years ago by injection with considerable relief, but two weeks ago, following an attack of dysentery, they returned with all of their former violence, rectum protruded and enormously swollen, exhibiting several tumors. A laxative prepared by Dr. Kidder of Lincoln, Mass., and the finest combination of the century with Antithermoline, applied *pro re nata* has entirely relieved him. He informed me yesterday that it was all reduced and he felt no inconvenience. He also related a peculiar experience, said that the bandage and pad with which he kept it in place and his underwear was frequently found saturated with water. I told him its property of abstracting water from the tissue was the manner of relieving congestion.

J. H. KNIGHT, M. D.
Eatonton, Ga., May 11, 1900.

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Mrs. B., twenty-six, cachectic acne for years; nourishment below par, steadily and slowly decreasing in weight, complaining of lassitude. Regular treatment for acne did not produce the desired effect. I ordered Cord. ol. morrhuae comp. (Hagee), tablespoonful after each meal and at night. In one week she reported a gain of four pounds and the eruption was in better condition, appetite increased, assimilation better, general sense of comfort. Three

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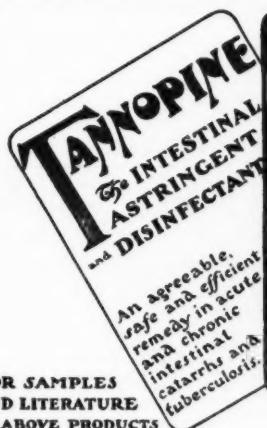
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